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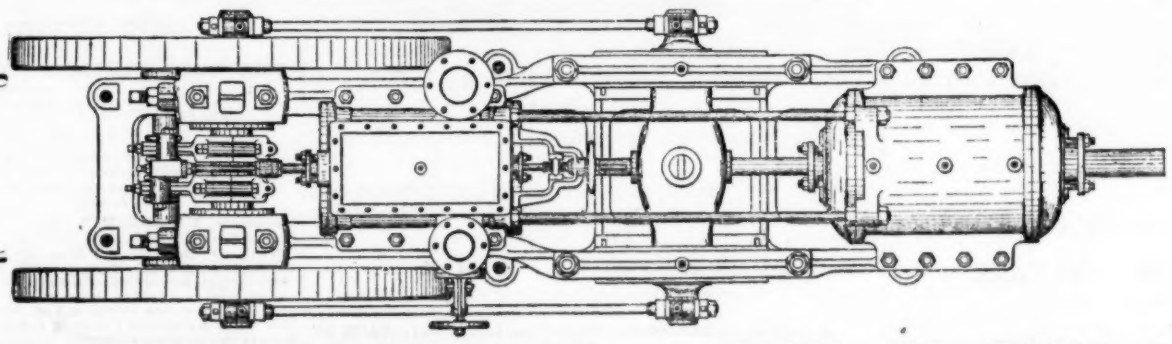

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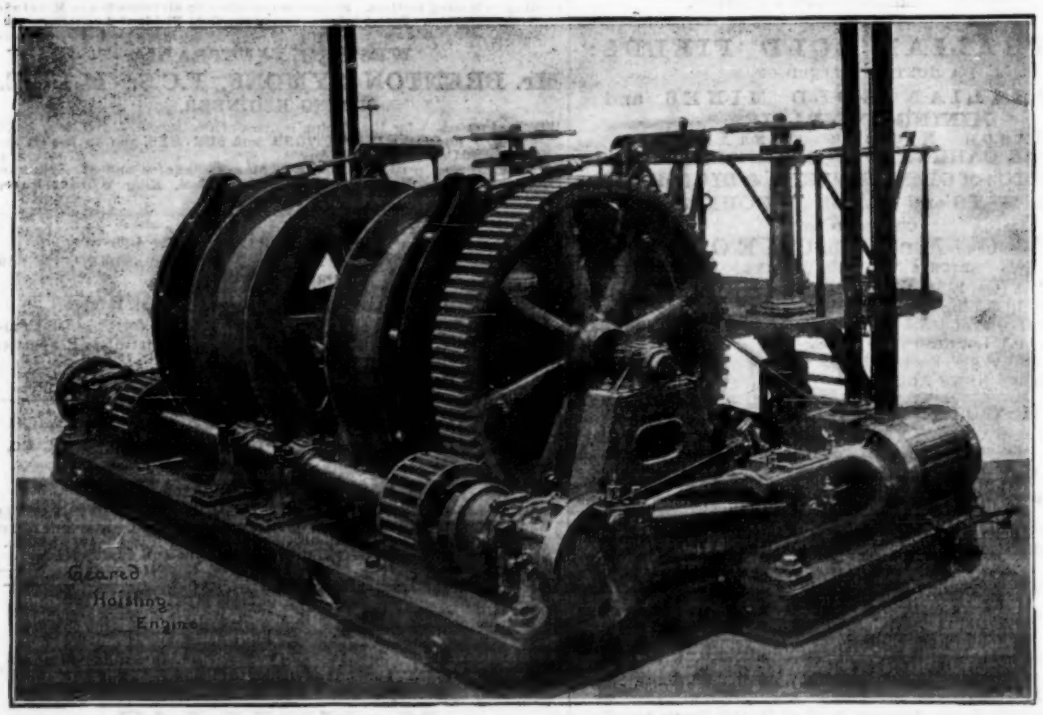

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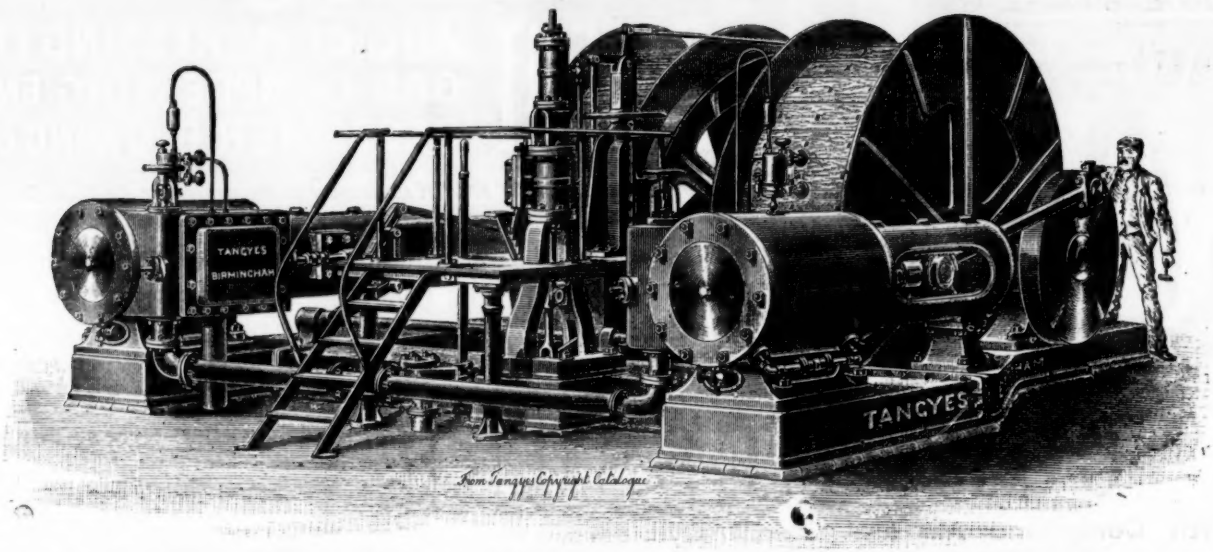

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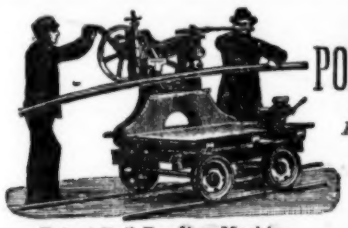

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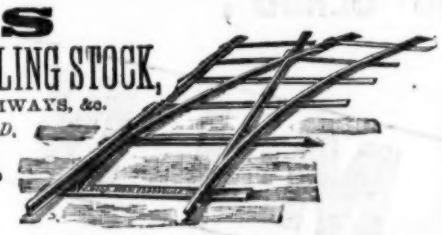

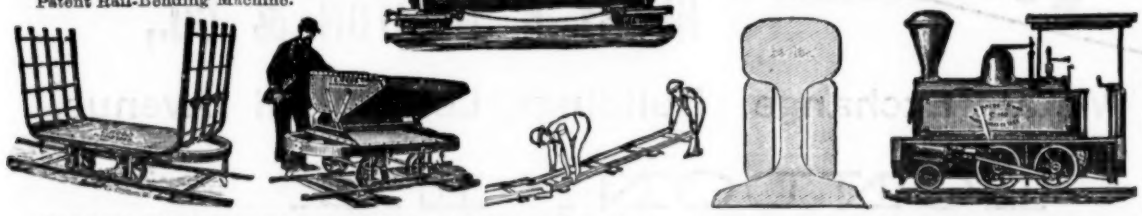

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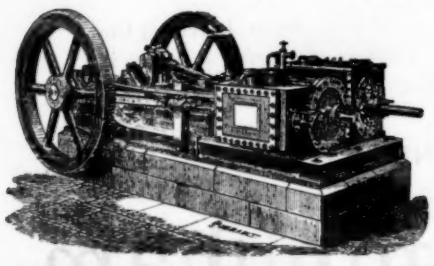

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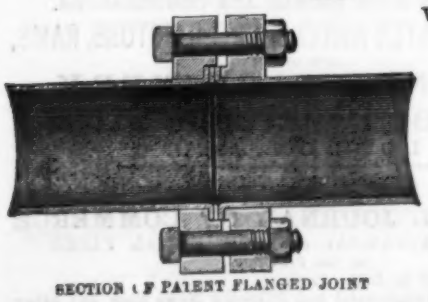

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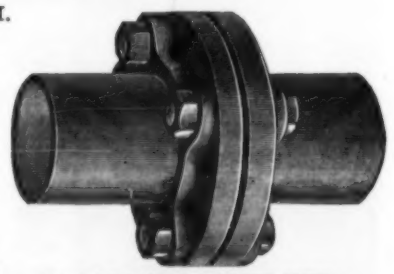

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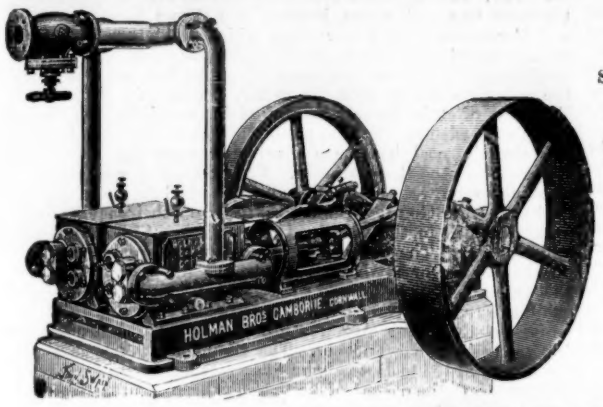

FIRST SILVER MEDAL, Highest Award, Mining Institute Contest, 1881.

Three Makers represented.

FIRST SILVER MEDAL Highest Award, Royal Cornwall Polytechnic Jubilee Exhibition Contest, 1882.

Five Makers represented.

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At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour

At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by 5 **FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove 1 **FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

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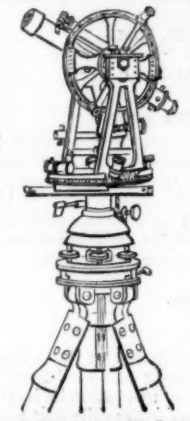
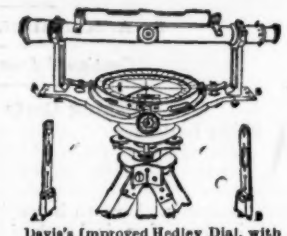
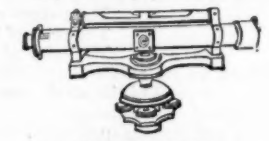


Transit Theodolite with Patent Hoffman Tripod Head, and Trough Compass.



Davis's Improved Hedley Dial, with Telescope and Sights Interchangeable and Patent Hoffman Tripod Head.



Dumpy Level with Hoffman Patent Tripod Head.

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SECTION (B) ELECTRICAL DEPARTMENT.

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The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

HOME CONTRACTS.

Railway Construction, March 25 (*Mallaig, Scotland.*).—For the works required in the construction of a railway (about 39¼ miles in length) from near Fort William to Mallaig—to be let in one contract—for the West Highland Railway Company. Plans and specifications may be seen and detailed schedules of quantities obtained, on payment of £5 5s., at the offices of Messrs. Simpson and Wilson, 175, Hope Street, Glasgow, on and after March 4.

Coal, March 26 (*Kidderminster.*).—For the supply of engine slack for 12 months, commencing April 5, to their upper and lower pumping stations, for the Town Council. Particulars and forms of tender can be obtained upon application. Tenders to be sent in to Mr. Arthur Comber, borough engineer, Town Hall, Kidderminster.

Rails, &c., March 26 (*Dublin*).—For the supply of 5 0 to 1000 tons steel bullhead rails, and also for 500 to 600 tons of cast-iron chairs, to be delivered into carts or wagons alongside ship in Belfast and in Dundalk to the extent of about half the quantities at each place, for the Great Northern Railway Company (Ireland), in strict accordance with the company's drawings and specifications, which can be had from Mr. Henry Plews, secretary, Amiens Street Terminus, Dublin.

Steel Bridge Rails, March 29 (*Northampton*).—For the supply and delivery at Castle Ashby Station, near Northampton, or to White Mills Wharf, near the above station, of about 30 tons of new steel bridge rails (22 lbs. to the yard) for the Corporation. Tenders, stating price per ton delivered, and also stating when delivery would be completed, and a price at per cwt. for 3 inches wrought-iron dogs to fasten same, to be sent to Mr. Wm. Shoosmith, town clerk, 29th inst.

Reservoir, March 30 (*Abertillery, Mon.*).—For the construction of a reservoir, filter beds, and works connected therewith, for the Urban District Council. Plans and specifications may be seen and bills of quantities and form of tender obtained at the office of Mr. Togarmah Rees, C.E., Corn Exchange Chambers, Newport, Mon.

Portland Cement, April 3 (*London*).—For the supply and delivery of Portland cement and steel axles for carriages and wagons for the East Indian Railway Company, as per specifications and drawing to be seen at the company's offices. Tenders are to be sent to Mr. A. P. Dunstan, secretary, Nicholas Lane, London, E.

Railway Works May 2 (*Cairo*).—Tenders are invited for the earthwork, masonry, pitching, buildings, and other works necessary for the line from Nag Hamadi to Keneh, for the Egyptian Railway Administration. Payments are guaranteed and will be made by the Commission of the Public Debt, Egypt. Tenders will be received at the Railway Administration Offices, Cairo. Conditions, general and technical description of works, may be seen during office hours on application to Colonel Western, Broadway Chambers, Westminster, S.W.

THE PILBARRA GOLD FIELDS (LIMITED).—The directors notify that they have appointed Mr. H. P. Pearse as mining superintendent of the company's properties, which include the Bamboo Queen and Bamboo Reward claim at Bamboo Creek. Mr. Pearse left London to enter upon his duties on the 15th inst.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

4531 James Weir, Holm Foundry, Cathcart, Renfrewshire.—Improvements in and relating to piston rings.—March 4

4543 George Frederick Wynne, Plas Gwyn, Miners, near Wrexham.—Improvements in machinery or apparatus for breaking or crushing rock or other hard substances.—March 4.

4576 Archibald H. Brintnell, 223, High Holborn, London.—Improvements in electric motors.—March 4.

4577 William Ackroyd and William Best, 33, Chancery Lane, London.—Improvements in or connected with apparatus for electrically lighting miners' safety lamps.—March 4.

4588 Raoul Mathieu, 4, South Street, Finsbury, London.—Improvements in the manufacture of pistons for syringes.—March 4.

4595 Alexander De Courcy Scott, 47, Lincoln's Inn Fields, London.—Improved process and apparatus for treating ores or liquors containing gold or silver or both.—March 4.

4607 Jacob Robert Müller-Landsman, 18, Buckingham Street, Strand, London.—Improved apparatus for air feed and smoke combustion in boiler furnaces.—March 4.

4624 James Robinson, 21, Joseph Street, Hunslet, Leeds.—Improvements in water gauges for use on steam boilers and other vessels of like nature.—March 5.

4792 Tammo Jacob Bezemer and Leonardus Arnoldus van Schie, 6, Lord Street, Liverpool.—Improvements in rotary engines.—March 5.

4838 John Armstrong, 20, Bucklersbury, London.—Method of abstracting gold and silver from the matrix or ores in which they are found, and apparatus therefor.—March 7.

4817 Benjamin Howarth Thwaite and Thomas James Denny, 95, Finsbury Pavement, London.—Improvements in solvent methods of extracting gold and silver from auriferous and argentiferous ores and in plant therefor.—March 7.

49.6 John Ernest Gibbens, Meadon Hall Works, near Sheffield.—Steam generating apparatus.—March 8.

4926 William Stewart, 15, Water Street, Liverpool.—An improved steam generator furnace.—March 8.

4975 Jacques Augustin Normand and Pierre Sigaudy, 47, Lincoln's Inn Fields, London.—Improvements in multitubular steam generators.—March 8.

4981 John Corry Fell, 1, Queen Victoria Street, London.—Improvements in apparatus for the concentration of minerals by means of compressed air.—March 8.

"WESTERN AUSTRALIA AND ITS WELFARE."—Under this title Mr. A. F. Calvert has reproduced a series of articles which appeared from time to time in the *West Australian Review*, dealing with various phases of West Australian mining life. All those who have perused Mr. Calvert's remarks, with their wealth of illustration, abundance of quotation, and vigour and aptness of style, will be glad of an opportunity of possessing them in a more convenient and permanent form.

LONDON AND PARIS FINANCIAL AND MINING CORPORATION (LIMITED).—The offices are at No. 5, Lothbury, E.C., and 2, Rue de l'Opera, Paris.

MESSRS. C. C. CANNELL AND CO.—The offices of this firm have been removed to 120, Bishopsgate-street Within, E.C.

A GOLD MINE IN LONDON.

AN INTERESTING EXHIBIT AT THE AQUARIUM.

VISITORS to the World's Fair, at Chicago, will recollect that one of the most interesting attractions there was a model of a gold mine, which was a faithful representation of the Saratoga Mine, located in the Rocky Mountains, Gilpin County, Colorado. It has now been brought over from America, and has been located at the Royal Aquarium, London, and bids fair to attract a large number of visitors. It is really a remarkable exhibition, and a visit to it gives one a correct idea of what a gold mine is.

The work is the result of many years' labour of Mr. William Keast, a Cornish miner, who worked in the Saratoga Mine for nearly seven years, and who perfected his model during his leisure hours. In appearance, it is a mountain in miniature divided down the middle, showing the various levels in the mine, and the miners at work. On the surface are miniature mules drawing carts filled with ore, the Halladie ropeway conveying the ore to the stamps, shaft house, blacksmith's shop, powder magazine, miners' boarding house, water flumes, stamp mills, sluice boxes, piles of wood for timbering the mine, the dump, ore bins, and all other buildings and appliances necessary to the operations of a mining plant.

The cage shaft runs to a supposed level of 600 feet, whilst the bucket and pump shaft runs to a 700 feet level. A representation of a prospect shaft is also given—at the mouth of which is a whim—supposed to be from 60 to 100 feet deep. Altogether, it is a wonderful thing, and the investor and layman, and even the expert, would be well repaid by a visit to it.

COMPANHIA DE MOZAMBIQUE.—A full board of the Companhia de Mozambique was held in Lisbon on March 14, at which Messrs. Bartissol, Conybeare, Ochs, and Pasteur, as representing French and English interests, and the Governor (Colonel Machado) were present. It was resolved at once to initiate important works of improvement with the object of increasing the facilities for imports and the development of the trade of Beira, as well as the company's territory generally. These improvements include the lighting of the entrance to the harbour, the erection of water reservoirs for supplying the town and shipping, the construction of a retaining wall to protect the town on the Chiveve side, and to improve the sanitary condition of the place. Also the extension of telegraphs to the frontier of the British South Africa Company's territory, and the systematic survey of the country. A mining department, which is under the immediate control of the London and Paris committees, and to which all applications for concessions, &c., are referred, has also been thoroughly organised.

KOFFIFONTEIN MINES (LIMITED).—The offices have been removed to 120, Bishopsgate-street Within, E.C.

THE CYANIDE PROCESS.

ITS PRACTICAL APPLICATION AND ECONOMICAL RESULTS.

By A. SCHEIDEL, Ph.D., E.M.

(*Continued from page 298.*)

VI. Working Costs of the Process.

As may be deduced from the whole tenor of this paper, the working costs of the cyanide process vary within wide limits, and depend on many circumstances. Locality is a prime factor in the costs of working any process, and expenses must be high where operations have to be carried on in an inaccessible situation, or where there is dearth of fuel, water, building material, &c. Apart from the question of locality, the cost depends principally upon three factors:—

The nature of the ore.
The price of labour.
The price of cyanide.

When an ore contains acid salts, and demands an alkali treatment, the price of the alkali must necessarily be added to other costs; and where the ores are slimy, recourse must be had to drying and mixing appliances, which also increase the cost to an extent depending on local circumstances. The principal labour involved in the process is the charging and discharging of the vats; or, if agitation is used, the charging of the agitator and the removing of the exhausted material from the filter appliances. The charging and discharging of the percolation vats may, under ordinary circumstances, be contracted for at a rate of about 25 cents per ton. The extent of the operations is naturally of great influence in regulating the cost of handling. Very large works apply mechanical means for discharging the vats, such as dredges and movable cranes, which reduce the expense of labour per ton of ore to a minimum. To give an instance of the labour employed in working the agitation process I mention the Utica Works in California, where the handling of the ore, and all the labour connected with the treatment amounts to $1 per ton; this applies to concentrates varying from $50 to $95 in value per ton. The cost of the cyanide is one of the principal charges in the process, and the cost of treatment depends to a great extent upon the price of cyanide, and on the amount consumed per ton of ore. The price of cyanide of from 95 to 98 per cent. strength now averages about 50 cents per lb., delivered at seaports, and for lower strength the rates are somewhat better.

The amount of cyanide consumed per ton of ore is between 1 lb. and 3 lbs.; the character of the ore has, however, the greatest influence on the consumption, and in many cases the cyanide process will be found the best, cheapest, and quickest method, even if a considerably larger amount of cyanide is consumed per ton. Naturally, as the quantity treated is greater the cost becomes proportionally less. In some mines, as at the Primrose Company, Johannesburg, tailings are treated for about $1 per ton, and it is very seldom that the cost in the Transvaal exceeds $2·50. In the Crown Reef Works the cost of treatment ranges from $1 to $1·37 per ton; this includes the royalty, which for the use of the MacArthur-Forrest patents amounts in South Africa to $1·25 per standard ounce of gold. In Revenue, Montana, the cost of treatment per ton of ore, including crushing, amalgamating, cyanide treatment, and royalty of $1 per ton, amounts to from $4 to $5 per ton. The cost of treatment of ore at the Mercur Mine, Utah, amounts to $2·40 per ton, not including royalty. The cost of ore treatment in the Crown Mines, New Zealand, is from $3·37 to $3·50; in the Waihi Company's Works, New Zealand, the cost amounted to $2·25 per ton of ore; the expenses are now reduced to $1·25, cost of crushing and patent royalty of 7½ per cent. on the bullion value not included. The treatment of concentrates is, as a rule, more expensive than that of ore and tailings; their value is, however, in most cases considerably higher than that of those materials, so that the cost per ounce of gold extracted is, with concentrates, generally much lower than with ore and tailings. The agitation treatment of concentrates (sulphurets) costs in the Utica Works, California, from $3·25 to $3·50 per ton, labour included. "Ores yielding upwards of 90 per cent. of their gold assay value have been treated at $1·25 per ton, and tailings containing less than $3 have been worked profitably. It is, therefore, safe to assume that under favourable circumstances, and apart from all costs of mining and crushing, the cyanide process is capable of application at a low figure."

VII. Cost of Cyanide Plants.

The cost of cyanide plants varies naturally with the system applied and the extent of the works. A well-equipped plant, with a capacity of 50 tons per day, will cost about $25,000, a 100-ton plant about $40,000. I shall have occasion to give details on the cost of plants when describing prominent and successful plants in different parts of the world, and I refer particularly to the corresponding chapter of the process in Africa.

VIII. Machinery and Appliances.

In discussing the various methods of applying cyanide, the machinery for each purpose has been described (see Chapter IV). Generally speaking, all plants have the same main features; modifications, however, will be suggested by special conditions of locality and character of ore. Economy in handling the ore is of the greatest importance, and should be made of first consideration in selecting the site for the plant and in its arrangement. The crushing machinery, if ores are to be treated without previous amalgamation, should be selected in accordance with the character of the material. The proper preparation of the ore is a very important item, and the crushing machinery should be selected so as to produce the smallest amount of dust if dry-crushing, and of slimes, if wet crushing of the ore is practised. For dry crushing, rolls should be preferred, on account of their giving a product of greater uniformity than stamps, which are now used to a great extent. It is with the cyanide process as with other leaching processes—the more equal in size the particles are, the better. Wet crushing, with the improvements necessary for mastering the slime difficulty, may ultimately win. Pumps of all constructions may be used for the transportation of the solutions, provided their material is not attacked by the alkaline cyanide solution. I shall refer to the general arrangement of plants in the corresponding chapter of the process in Africa.

IX.—Laboratory Work.

Exact laboratory experiments must precede all cyanide mill operations; the required fineness of the ore, the strength of the cyanide solution, and the length of time for its action on the ore, have to be established by experiment. The correct strength necessary for treating any class of ore may be readily determined in the laboratory by treating a weighed quantity of the ore with cyanide solutions of different strength, and for various periods of time. After treatment, the amount of gold extracted and the quantity of cyanide consumed should be determined. These results are then compared with the original contents of gold and silver in the ores, and the original strength of cyanogen in the solution used. A method of rapidly determining the gold in the cyanide liquors consists in evaporating a known quantity to dryness on lead foil (free of silver), and cupelling the lead in the usual manner. In the presence of base metals, the liquor should be evaporated with the addition of litharge, and the residue assayed for gold and silver in the usual manner. The point to be aimed at is to consume as little as possible of cyanide and to extract at the same time as high a percentage of gold and silver as possible. The water used for making up the solutions should be examined for carbonic acid, free sulphuric acid, and sulphates. A chief point to be investigated in the laboratory is the "acidity" of the ore, by which term is understood the presence of products arising from the decomposition of sulphurets. These chiefly consist of free sulphuric acid and of products derived from a more or less advanced oxidation of pyritic matter, such as proto and per sulphates and basic iron salts. The exact amount of free acid contained in an ore sample can be readily determined by shaking a certain weight with water, and adding standard normal or one-tenth normal caustic soda solution, till the point of the alkalinity is reached, as indicated by litmus or some other indicator. The means to prevent the ill effects of the acidity have been discussed in the chapter on chemistry. The amount of soda or lime required for the ore is easily calculated from the consumption of normal soda solution as shown by the above experiment. The cyanide solution will, in many cases, contain after the treatment of ore the evidence of secondary reactions, and a complete chemical analysis of the solution, before it comes into contact with the zinc, should in all cases be made. The explanation of unsatisfactory results with cyanide treatment will be found, in many instances, by means of such examination.

The reasons why one ore yields its gold readily to cyanide treatment, and others of a similar chemical composition do not are not always apparent; chemical analysis and microscopical examination should be used along with practical tests. As a programme for the examination of an ore in reference to its fitness for cyanide treatment, the following may be suggested. (1) The ore shall be crushed and passed through a 30-mesh sieve, and part of it assayed. (2) The "acidity," if any, of the ore, shall be determined, as described before, in (say) 100 grams; if necessary, water and alkali washes will then be applied before the ore is submitted to cyanide treatment. (3) Shaking tests in glass bottles with solutions of various strength during various periods of time will determine the amount of cyanide consumed by the ore, the strength of solution required, and the time necessary for the reaction. Cyanide determination in the solution and assay of the ore, after treatment, provide the required data. Agitation tests will decide if an ore is suited for cyanide or not. In cases of successful cyanide treatment by shaking tests, percolation tests of samples should then be made. The simplest apparatus for the purpose is a glass funnel of large size, the neck of which is closed by an india-rubber pipe and clip; a lamp chimney closed at one end by a stopper of india-rubber, which carries a glass tube, may be used for the same purpose. The ore is placed on a filter-bed of pebbles, which is covered by a piece of flannel or filter-paper. Experiments with equal weights of ore, but with solutions of various strength, and exposed during various periods of time, should be made simultaneously; analyses of the percolated solutions and assays of the well washed residues will then show the best conditions of treatment. Small tests, if properly conducted, are excellent guides as to the treatment of ore on a large scale. In a cyanide plant there is ample employment for the chemist in charge; all operations could be controlled by him by assays and analyses; improvements on all parts of the process may be effected by careful observation and continued investigation. The non-success of the cyanide process in various mining camps may be attributed to the incompetency of the men to whose care the works were entrusted. Mineowners will find it profitable to employ, at least during the first time of their using cyanide, a competent man, instead of "finding out" for themselves, at the expense of much time and money. When the process is once successfully and firmly established, an intelligent foreman will easily acquire the necessary knowledge to test and make up the solutions.

X.—Danger in Working the Process.

The deadly poisonous character of the reagent was once considered to be a great obstacle in the way of its successful introduction. However, in the first place, the solutions used are so diluted that the hydrocyanic acid evolved from them is of no consequence if the works are properly ventilated. For safety, as much as for practical reasons, all materials should be tested for acid before treatment, and, if necessary, neutralised. In the second place, there is no necessity for those working the process to come into contact with cyanide, solid or in solution; even properly-conducted cleaning up does not require contact. Some, but very few, have a susceptibility for cyanide, and with them the most diluted solutions, if brought into contact with the skin, produce eruptions which, although not dangerous, are itching and annoying; such men should not be employed in cyanide works. In case of bad ventilation, complaints of headache, faintness, and dizziness may be heard. In instances where circumstances require that hands and arms should be brought in contact with the solution, I found a coating of oil or coal oil (kerosene) an effective protection for the skin. The process is now used so generally, and on such a gigantic scale, that many hundred men are constantly employed in the works; considering the dangerous character of the cyanide, the number of accidents is remarkably small, and it may justly be said that no more danger is incurred in the working of the cyanide process, under ordinary precautions, than there is in working in establishments of chemical and metallurgical industries, where corrosive liquids and acids are constantly in use. Extraction of gold and silver by cyanide will compare, as to fatal accidents, very favourably with most chemical and metallurgical industries. It is, however, always well to instruct the men how to act in cases of emergency. Put the patient into a hot bath, and apply cold water to his head and back. In cases of internal poisoning, vomiting by physical means, or by emetics, is advised. Freshly-precipitated carbonate of iron, obtained by mixing equal quantities of sodium carbonate and ferrous sulphate, is recommended for internal use; the two chemicals should be kept on hand ready for compounding this antidote. If the poisoning is the consequence of inhalation of hydrocyanic acid, it is advisable to make the patient inhale a small quantity of chlorine gas, ammonia, or ether; rubbing with camphor-alcohol is recommended. It has been reported of late that Dr. Johan Antal, a Hungarian toxicologist, has notified the Hungarian Society of Medicine that he had found a perfect antidote for prussic acid in nitrate of cobalt; he quoted 40 cases of its use with perfect success.

(*To be continued.*)

THE African Gold Recovery Company (Limited) announce that 49,260 ounces of gold have been recovered at the Rand, and 8300 ounces in other districts; total, 57,560 ounces during February, by means of their MacArthur-Forrest cyanide process. The January total was 58,634 ounces.

— The secretary of THE ISLE OF MAN MINING COMPANY sold on Tuesday last 100 tons of this company's ore at £8 8s. 6d. per ton.

THE MINERAL WEALTH OF SIBERIA.

COAL.

(*Continued from page 274.*)

IN the Amour Littoral region, coal deposits occur beyond the Baikal, directly on the south eastern shore of this vast reservoir. Here, at 8 versts' distance from the Posolsk monastery, there are two coal seams, between the Rivers Kourkoushevka and Peresmna. The upper seam, which is 1½ sagene thick, is broken up into thin seams, and contains the stems and roots of fossil trees. The lower coal seam, which lies two sagenes below the upper, on a level with the water, consists of a denser coal. The coal of this deposit is worked for supplying the Baikal steamboats with fuel, but the production is very limited. Besides this deposit, coal has been discovered near the Baikal, at the mouth of the River Mourin. The presence of coal seams is also known between Verkhneoudinsk and Selenginsk on the banks of Lake Gousinyi; and the traces of their having been burnt are still in the superincumbent strata of sandstone and schistose clay. The occurrence of coal was discovered in 1858 on the River Ourya, which falls into the Aksha, a tributary of the Onon. This is a lignite coal, which in some places still exhibits a tree structure. The Douroisk and Chalbouchinsk deposits on the River Argouna are situated at a distance of 160 versts from one another. The Chalbouchinsk deposit was discovered in 1742. Both of these deposits have been frequently explored, but the extent of neither has been accurately determined. The Douroisk deposit is situated on the bank of the Argouna, 15 versts below the Koulassatouev frontier station. A seam of good quality coal 3½ feet thick is known here. Should subsequent explorings show that this coal seam has a considerable extension, then it might acquire a great importance, as it is situated on the very bank of the River Argouna, along which the coal could easily be transported to the Amour.

Numerous exploratory workings, carried on since the middle of the last century, have shown the presence of several coal seams in the Chalbouchinsk deposit; but the small thickness of these seams and large amount of ash and sulphur pyrites in the coal, deprive it of any great importance.

Besides these deposits, seams of brown coal of recent formation occur in the Transbaikal on the upper courses of the River Onon, and also on the Shilka below the Shilkin Works. The occurrence of coal is known on the River Zea, on the parallels of Albazina, and on the Belyi hills opposite the mouth of the Silindzha. From three to four coal seams crop out on the River Boureya. These seams are vertical owing to the extreme distortion of the entire stratification. Each of these seams is from 1 to 2 feet thick, and the coal is of good quality. The coal is interstratified with sandstone and clay slate, the latter of which bears distinct prints of conifer vegetation, showing that the formation belongs to the Jurassic system. The same strata of sandstone and clay slate, with interlayers of coal up to 1 foot thick, are found at a distance of 150 versts from the above-mentioned outcrops in several localities up to the mouth of the Numan.

Among the very many coal deposits on the middle courses of the Amour the most remarkable is that discovered at a distance of 9 versts above the station of Innokentievsk, where two seams of brown coal can be followed up for a distance of 2 versts. These seams lie between beds of sandstone, and hard yellowish grey clay. The coal seams are from 3 to 5 feet thick. This coal consists of the remains of conifer trees, and the superincumbent clay contains numerous remains of leaves, fruits, and other portions of plants, which often are very like the now-existing plants; from which, it may be concluded, that it is of very recent formation, and belongs to the Tertiary system. Seams of brown coal also occur at several points along the lower course of the Amour at a short distance from its mouth. These seams occur in strata of sandstone and clay slate exactly similar to those in the upper course of the Amour. A deposit of brown coal has been discovered at a distance of 160 versts from the town of Nikolaevsk, near the village of Novo-Mikhailovsk, up the Amour. The thickest of the seams in this deposit is 5½ feet. Seams of brown coal, up to 1 foot thick, also occur at several points along the lower course of the Amour. The South Oussouryisk region also contains beds of coal in many places. The first discovery of coal in this region was made at the time of its occupation by the Russians, at the Possietak's gulf, where there are three seams of coal, the thickest of which is 4 feet. Coal was extracted from these deposits in the sixties to supply the Siberian flotilla. The following coal beds occur to the east of Possietsk's gulf.

Beds of coal have been discovered in the basin of the Amour along the Rivers Sedima, Mangougal, and Ambabira, and at the mouth of the River Souifouna. Moreover, coal seams are also known up the River Souifouna, on its right tributary—the Chingoouza—in the neighbourhood of the village of Nikolsk, and in the upper courses of the river near the stations of Konstantinovsk and Fadeevsk. The exploitation of the coal in various localities on the mouth—Souifouna—was begun in the sixties, and is being continued to the present day. In the Oussouryisk Gulf, coal beds have been discovered on the River Tsimou-khe, at the mouth of the River Kangoouza, and on the River Shite-khe. Coal is also known to occur on the Island of Poutiatin and on the north-eastern shore of Strelok Bay. Vast deposits of coal have been discovered 40 versts up the River Souchan, which falls into the Gulf of America. In 1886 a special mining expedition was sent there, and the exploratory workings conducted by it showed the presence of three coal seams from ½ to 1 sagene thick, and having a considerable extension. From trials made by the fleet it was found that this coal is a semi-anthracite resembling Cardiff coal in its properties. A mine was laid out there by the expedition, and it is proposed to offer the exploitation of this mine to private enterprise. Lastly, a deposit of coal has been found in the Gulf of St. Olga on Cape Nizmen.

There are rich coal fields on the Island of Saghalien. The coal became known to the Russian sailors in 1850, when they began working it in the bay between Cape Zhonkier (Doue) and Cape Khoindzhe. From that time the coal beds in the neighbourhood of the station of Doue have been worked uninterruptedly. Since 1875, these mines have been in the hands of a private company, who has now increased their output to a million pouds. The coal lies in a whole series of beds from 2 to 5 feet thick; it is of excellent quality, and quite equals the best sorts of Welsh coal. It contains from 74 to 84 per cent. of carbon, a very small amount of ash, and it gives up to 60 per cent. of coke. The coal is chiefly consumed by the Russian vessels navigating the shores of Siberia, but it is also used by foreign vessels coming to the Russian ports of the Pacific. A number of coal beds have been discovered to the north and south of the Doue station, but only one of these, situated between the mouths of the Rivers Sertounai and Nayassi, has been worked. The quality of this coal and its mode of occurrence are exactly similar to those of the Doue coal. Several coal deposits are also known in the interior of the island.

In the region of the Kirghiz Steppes the search for coal formed the special care of the Government for a very long time. The

prospectings were carried on in the Orenburg region, adjacent to the Kirghiz Steppes, and the chief inducement for this search was the entire impoverishment of the forests in this region, necessitating the abandonment of all its mineral wealth for want of fuel. The vast area of the Obschyi Syrt, which 80 or 100 years ago was covered with forest, is now transformed into a bare steppe without a single twig, and where the only fuel is dried dung. The vast Bashkir forests, which, according to the general survey, comprised four million dessiatines, have been more than half felled. The search for coal in different parts of the Orenburg steppes was not, however, crowned with success. Prospectings conducted in the Obschyi Syrt only showed the presence of combustible schist of medium quality belonging to the Jurassic system. The deposits of brown coal discovered in the Troitsk and Cheliabinsk districts have up to now been considered unworthy of attention, but apparently other deposits have recently been discovered which might receive a practical application.

Two vast coal fields have been discovered further in the Kirghiz Steppes, in its western portion in the Tourgai Province. The first of these is situated at 170 versts' distance to the south-east of the town of Tourgai, formerly an Orenburg fortress, on the upper courses of the River Dzhilanchik, near Maidam Tal. Two horizontal seams of brown coal are known there. The thickness of the upper seam is from 1 to 3½ feet, and the lower seam is about 1 foot thick; they are separated by a seam of soft blue clay 1 foot thick. The coal of these seams is of two kinds—one a dense bituminous coal with a bright conchoidal fracture, and the other a slate coal. This deposit has been followed up by exploratory workings for a distance of 5 versts in length up the River Dzhilanchik, and for a width of 100 to 200 sagenes. Taking the mean thickness of the upper seam only as 2 feet, and the weight of a cubic sagene of the coal as 340 pouds, the explored portion of the upper seam would contain about 40 million pouds.

The second deposit of brown coal is situated at 100 versts to the east-north-east of the town of Tourgai, at the Yar-Koue wells, on the declivity of a height which forms, as it were, the mountain shore of the valley of the River Tourgai. Some ancient wells were found on the declivity of this height at 5 versts' distance from the above-mentioned wells, and in clearing them out traces of coal were found in them. They were then deepened, and a seam of coal about 1 sagene thick was encountered. This discovery was followed up by extensive exploratory workings, which embraced an area of 3¼ square versts of coal field. As the average thickness of the coal seam is 1 sagene, and a cubic sagene of coal was found by experiment to weigh nearly 340 pouds, the area explored contains over 275 million pouds of coal. The coal of this deposit is dark brown, has a laminar structure and a conchoidal fracture. It burns with a bright flame, and gives from 4 to 7 per cent. of ash; some portions contain sulphur pyrites. It has been proved by experiment that this coal is quite suitable both for ordinary heating and for steam purposes—as on the steamers of the Syr-Daria—and also for treating metals in reverberatory furnaces.

Several coal seams are known in the Akmolinsk province on the upper courses of the Rivers Ishim, Sokour, and others, which fall into the Noura. The Karagandinsk Pit, belonging to Messrs. Riazanov, is situated at 200 versts to the north-west of Karraralinsk, near the borders of the Akmolinsk and Semipalatinsk provinces. Two coal seams are known, 1 and 2½ sagenes thick. Both are worked, and have been shown by exploratory workings to extend on both sides to the east and west for a distance of 11 and 9 versts. Thus this deposit is very vast. The coal is a true coal, with 8 to 12 per cent. of ash and semi-caking coke. In former times the Spassk Works, situated at 30 versts' distance to the south of the pits, smelted their copper to the amount of 30,000 pouds annually, with this coal. The yield of the Karagandinsk Mine has been somewhat considerable during the last 15 years, and in 1884 it exceeded 1,500,000 pouds of coal. Many coal seams are known in the Pavlodarsk, Karkaralinsk, and Semipalatinsk districts, and also in the neighbourhood of the town of Sergiopole.

In the Pavlodar and Karkaralinsk district, the Taldykoulsk Mine is on the first coal bed discovered in the Kirghiz Steppes, in 1838. It is situated at 25 versts to the north-east of the Alexandrovsk Works, and at about 200 versts from Pavlodar. Exploratory workings were carried out at the beginning of the forties, which showed that the deposit extended for a length of 1 verst, and for a width of ½ verst. As many as eight coal seams were discovered from 1 to 3½ feet thick. This coal was used in the smithies, and partly in smelting the lead ores at the Alexandrovsk works. Altogether 337,000 pouds of coal were extracted from this deposit between 1838 and 1860. The Sarykoulsk coal deposit is situated at 12 versts' distance in the south-west of the Taldykoulsk pits, and 50 versts to the north of Bayan-Aoula. The coal here occurs in a bed 4 feet thick, at a depth of 16 feet under the surface. The Maoukobensk Coal Mine is situated at a distance of 5 versts from the Sarykoulsk deposit, and at 20 versts to the north-west of the Alexandrovsk Works. The total thickness of the three workable coal seams is 5 feet. The coal seams have been determined over an area of six square versts. The coal was found by chemical analyses to contain 50·5 per cent. of carbon, 42·10 per cent. of volatile matter, and 1·4 per cent. of ash. The coal is black, bituminous, burns with a long flame, but does not cake. It was used for copper smelting. The mine was worked during 1869 and 1870.

The Nikolsk Mine is situated at a distance of 90 to 100 versts to the north-west of the Alexandrovsk Works, near Lake Alka-Sor. There are two seams of anthracite, 2·25 and 6 sagenes thick. They lie between clay slates and limestone. The anthracite was found by analyses to contain 74 per cent. of carbon, 14 per cent. of volatile matter, and 12 per cent. of ash. It was found by trials made at the copper smelting works that this coal gives a powerful heat. The Kysyltavsk Mine is situated at a distance of about 70 versts from the Alexandrovsk Works, and 90 versts from the Bogoslovsk Copper and Lead Smelting Works. This is one of the best coal fields known. It includes five seams from 2 to 4 feet thick. The Ioanna-Predtechensk Copper Smelting Works are erected immediately over the mine. The Kysyltavsk coal gives a fairly good coke. In 1873 this mine yielded altogether 2½ million pouds of coal. The Dzhemantouzsk Mine is also upon one of the thickest and best coal beds yet found in the Kirghiz Steppes. It was discovered in 1864 at 90 versts to the south of the Alexandrovsk Works. The mine comprises five coal seams from 1½ to 3 feet thick, which unite at a depth of 13 sagenes into one bed, which dips at an angle of 32° to 42°. The Dzhemantouzsk coal is an anthracite of a gray colour. It is dense and bright, with a roughly conchoidal fracture and gives a great heat, but no coke. It contains a very small amount of sulphur, pyrites, and gypsum. This deposit is situated at 60 versts' distance from the River Irtysh. In the Semipalatinsk district coal was first discovered in 1869, by Mr. Permikin, a gold mine owner, at 7 versts' distance from the Grachevsk station and 120 versts from the town of Semipalatinsk.

(*To be continued.*)

In accordance with a cablegram received by the NEW JAGERSFONTEIN MINING AND EXPLORATION COMPANY from the head office at Kimberley, a dividend of 10 per cent., equal to £1 per share, has been declared for the half-year ended March 31 last.

AURIFEROUS RESOURCES OF VICTORIA.

PART II.—A FIELD FOR CAPITAL.

By H. ARMYTAGE, B.A.

(*Concluded from page 299.*)

VICTORIANS would, indeed, be ungrateful did they not value gold mining at its due worth. Within the last 40 or 50 years there has been produced within our boundaries gold valued at £240,000,000 million sterling. And while it is true that the great output has fallen off, we still produce from £2,500,000 to £3,000,000 worth annually, and employ from 20,000 to 25,000 men. The most unsatisfactory fact about our gold production is that we lose something like three times as much as we pay in dividends. Experiments conducted by the Department of Mines show that we lose £1,500,000 of gold after all the labour and trouble spent in raising the stone to the surface, and crushing it. In many of the small claims in Gippsland at the present day they are losing from 50 to 75 per cent. of the gold. I am within the mark when I say that during the last 50 years we have lost £50,000,000 worth of gold; I believe the amount must be more like £75,000,000. It is appalling to think that all this wealth, after actually coming into our hands, has been allowed to run into our gullies and creeks, from whence it has been hopelessly dispersed by our winter floods. This loss is largely due to the want of modern appliances which are in common use in Germany and America. Some of our most famous mines have no better gold-saving appliances than copper plates and blankets, and the vast majority of them know nothing about classification. It is a state of things which I would not have credited had I not seen it.

On the other hand, there is a satisfactory feature in connection with the industry, and that is the increasing depth at which we are obtaining payable gold. Last year, 2440 tons of quartz were raised from between 1900 and 2050 feet deep in the New Chum Mine, which yielded 6303 ounces, or 2½ ounces per ton. In the Great Central Victoria Mine 408 tons were raised, yielding 819 ounces; and in the Garibaldi Mine, from the 2170 feet level, 2191 tons gave 1862 ounces.

I do not propose to deal further with the great mines of the country, but to direct attention to the neglected gold fields, and to the enormous field open to the capitalist and to the prospector. The Department of Mines in Victoria is using the most strenuous efforts to draw attention to the enormous field for enterprise which the country offers in this direction. It gives instructions, prints papers and suggestions, offers assistance in the way of free railway passes and miners' rights, and, when possible, water supply to any one who announces his intention of prospecting. When it has definite assurance that capital is ready to follow any favourable developments it employs its diamond drills, and even when it has the means, grants monetary assistance, within a limit, to the extent of one-half the expense incurred in development work. It is publishing a most interesting series of papers upon our neglected gold fields. One need only glance at them to learn the truth of my statements as to our enormous resources and the extraordinary reasons which led to many a known payable reef being abandoned in the olden days.

The Secretary of Mines in his annual report, has, for the last few years, drawn special attention to the enormous length of unworked auriferous leads proved by the Government drills to exist in rich gold-bearing country. I wrote to him specially about the subject, and he replied, "I have the honour to inform you that the Government Geologist states that the area referred to is principally that extending from Dowling Forest to Clunes, and thence to Moolat. From Moolat northward along the Lodden Valley is a long strip of country underlaid by leads, likely to be auriferous, being on the course of a known gold-bearing belt. The aggregate length may be safely estimated at 40 miles of unworked main leads, besides tributaries."

The great finds in Western Australia have drawn public attention away from our mines, so that we find it increasingly difficult to obtain capital to work them. Yet the early finds in Victoria greatly exceeded the finds which have been made in that colony. I asked for an authoritative statement upon this point also, and received the following:—

"I may state that for extent and richness the early discoveries in Victoria vastly exceeded anything hitherto found in West Australia, whatever the future may reveal in the latter colony. There are abundant probabilities of further successful gold mining developments in Victoria."

It is true that some nice nuggets have been found in West Australia, but the great nuggets of the world were found in Victoria. For instance, the "Welcome Stranger," found at Moliagul, gave 2302 ounces of smelted gold. "The Welcome" nugget, 2019 ounces; "Precious," found at Berlin, 1621 ounces; "The Viscount Canterbury," 1103 ounces. In 1887, "The Lady Loch," found in Sulky Gulley, weighed 617 ounces. It is true that the reefs in West Australia show above the surface 4 or 5 feet, and that gold can be seen on the stone. Yet the main reef at Bendigo stood up 20 feet high, and the gold glittered in the sun. I do not deny that rich patches have been found at Bayley's, the Londonderry, the Wealth of Nations; neither can it be denied that at Tarnagulla 40 tons of stone from King's claim yielded 1 lb. weight of gold to the bucket, that the main reef was 20 feet wide and yielded 6 ounces per ton, that in one overlapping claim of 9½ feet only the jumpers obtained £26,000 worth of gold, and that recorded finds at Steiglitz, Wood's Point, and elsewhere were almost as phenomenal.

It is true these stories belong to the past. We will see what the Department says of the present possibilities. On 30th October last the Secretary wrote me as follows:—

"I have the honour to inform you that the Department is willing and anxious to encourage those who desire to invest capital in developing the mineral resources of this colony, and it is ready to give such special facilities as may be possible under the circumstances of each case. The continuous finds which are being made of new quartz-bearing lodes, and the large area of undeveloped auriferous deep leads prove the extent of the mineral resources of the colony which yet remain practically undeveloped."

Locally, it is a well-known fact, that in the early days hundreds of reefs, which would pay handsome dividends now-a-days, were deserted from various causes. Let us see what the Department says upon this point.

The Secretary wrote: "The Government Geologist states that with regard to the number of reefs at present idle in Victoria, there are reports as to rich yields when worked, and stated causes of abandonment in the way of pressure of water, want of capital, owing to making no reserve funds during prosperity, insufficient appliances at the time, excessive cost of treatment, &c., &c."

I will give a few extracts from our daily newspapers to show to what the Secretary refers when he writes of the continuous finds which are being made. On the 25th September, at Tarnagulla, a couple of men discovered a reef, and took £1000 worth of gold from a cubic yard of quartz rubble and loose earth about the surface. A day or two afterwards another find in the district was reported, including a 13 ounce nugget. On the 24th September, a human skeleton was found at the bottom of an old shaft. The constable who went down to gather the bones together washed out a payable prospect from amongst them; this took place near Castlemain. On this day some rich specimens were obtained upon the surface at the Old Quartz Hill lease. On the 3rd October 25 tons were treated for 9 ounces per ton, and another parcel of 7 tons yielded 8 ounces per ton from new finds at Mount Elliot. On the 28th September two nuggets, weighing 11 ounces and 3 ounces respectively, were found at Inglewood. On the 13th October, at Daylesford, two men unearthed a reef 12 feet wide, yielding 2 to 3 ounces per ton. On the 16th October two more rich reefs were found at Tarnagulla. Many reports were coming to hand of fresh finds in the Albury district. On the 18th October two nuggets and other gold were found in the Daylesford district. On the 20th October a rich reef was discovered at Newstead by a "retrenched" bank clerk. On the 23rd October a prospector unearthed a reef 3 feet 6 inches wide, rich with gold specimens, at Moe, in Gippsland. On 26th October a rich discovery was reported from Heathcote, a deserted diggings; and thus the reports run on, month after month. In most instances the miners work the claim until some small difficulty is too great for their limited resources, and unless some capitalist happens to be on the spot the claim is abandoned, when from £500 to £2000 would have enabled it to develope into a good paying concern.

I have particulars myself of some of these deserted but valuable claims, one from which 1000 tons of stone yielded 1000 ounces of gold from a 4-foot reef; the reef was disturbed at water level and left. Another yielded 1052 ounces from 354 tons, as shown by the records of the local branch of the Union Bank. A note to an old letter in my possession states that "the average number of men employed underground was four, all partners in the claim." The quartz was so rich that they only employed paid men at the surface. Further information from the Warden's Office shows that this claim has not been worked for 20 years. I sent a man up to peg out the tailings, but he found that they had all been washed down the creek. I knew I had no chance to raise the necessary capital to test the mine—about £500—so left it. An old miner showed me a quartz specimen, thick with gold, which he had kept by him for 30 years. It was a piece he found in some alluvial which he had worked right up to the reef. Like all miners in those days, he would not touch the reef, and it has never been worked to this day. These old miners' stories are more often true than one would imagine. The rich find I mentioned at Tarnagulla probably proved the truth of such a story published in the "Neglected Gold Fields" a few weeks earlier. Last October, in Melbourne, the Director of the School of Mines at Bairnsdale, showed me an 8-ounce nugget which had been brought in a few days before. He told me that nuggets were from time to time brought in from the locality where this was found, but, as it was rather far back on the bush, working miners had not the means to do any thorough working or prospecting for the reef. There are parts of Gippsland where the foot of white man has never been, and yet, as the prospector is gradually forcing his way out, reefs and alluvials are constantly being found. Within the last few years an enormous deposit, 30 to 70 feet wide, running right through a large hill, and assaying up to 1 ounce to the ton, has been discovered. At Mallacoota inlet gold was discovered in the cliffs 50 miles east of any permanent settlement, and the whole country in between is known to be full of reefs, and east of that again are hundreds of miles of primeval bush. The gentlemen I last mentioned in a letter to me commenting upon some remarks I had made in a speech in the Assembly upon the mineral wealth of East Gippsland wrote, "I can assure you that the district contains hundreds of miles of unexplored auriferous country, and is teeming with all forms of minerals."

In this part of Victoria the gold almost invariably becomes associated with other minerals at the water level, and is often so associated from the surface down, so that capital is essential to erect the necessary plants. In fact, the universal cry goes up from all our gold fields for more capital.

In conclusion, let me give extracts from letters I received from some of our public men:—

The Hon. George Turner (Premier):—"There is no doubt we have a large field for the profitable employment of money in our mineral resources."

The Hon. H. Foster (Minister for Mines): "There is an ample field for the successful expenditure of capital in acquiring and prospecting mining properties in Victoria."

The Hon. A. R. Outtrim (Minister for Mines, 1891-92):—"Allow me to state, as an ex-Minister for Mines, that there are many localities in which it only requires capital to develope the known mineral resources."

The Hon. H. McColl (Minister for Mines, 1893-4):—"Speaking as an ex-Minister for Mines, just leaving office, and having travelled over nearly all the mining districts in Victoria, I can say with confidence that there is a wide and profitable field for investment in our mines here. Their permanency and recurring richness at depths far below former payable formations are becoming more proved daily. Ground, where it only needs good, honest work to be done can be had for sums comparatively small, which will certainly well repay investors. What is wanted is capital to work mines here."

CITIZEN GOLD MINING COMPANY (LIMITED).—An extraordinary general meeting of the Citizen Gold Mining Company (Limited) was held on Tuesday, at Cannon-street Hotel, E.C.—Mr. William Nichols Thomas presided, and said that on the last occasion that he addressed the shareholders, resolutions to wind-up the company and appoint liquidators were put to the meeting, and he, acting under counsel's advice, declared them carried. A certain section of the shareholders, however, at once instituted proceedings in the Supreme Court to restrain the board from calling a second confirmatory meeting. He was present in court when the injunction was heard, and Mr. Justice Kekewich, without discussing the question of the amendment moved, stated that he was not prepared to say that his (the Chairman's) ruling at the previous meeting was incorrect, but that the weight of evidence was in favour of the resolutions not being carried, and, under those circumstances, the Judge restrained the second meeting from being called. The board thereupon summoned another meeting to pass the resolutions to wind-up the company, and appoint Mr. Smart as a liquidator. The directors had given the dissentient shareholders every opportunity of settling the matter amicably, and he sincerely hoped it would be carried out in that manner.—Mr. Pierce Morrison moved the following resolutions, which were unanimously adopted:—"That this company be wound-up voluntarily under the provisions of the Companies Acts, 1862 and 1867;" "That Mr. Frederick B. Smart (of the firm of Messrs. F. B. Smart and Co., of 22, Queen-street, E.C.), chartered accountant, and Mr. Frederick Whinney, 8, Old Jewry, E.C., be and are hereby appointed liquidators, and that their remuneration be the sum of 150 guineas."—A vote of thanks to the Chairman terminated the proceedings.

We are informed that Messrs. E. P. Mathers and T. S. Marshall have been appointed the London committee, and Mr. John Nelson the London secretary, of the NEW ARISTON GOLD MINING COMPANY (LIMITED). The offices of the company, after 31st March, will be at Winchester House, Old Broad-street, E.C.

BROKEN HILL PROPRIETARY COMPANY.

HALF-YEARLY REPORT.

THE report by the directors of the Broken Hill Proprietary Company (Limited) for the half-year ending 30th November, 1894, and submitted at the half-yearly meeting of the shareholders held in Melbourne on 31st January last, is as follows:—

Refinery.

Work in this department has again proved to be of the most satisfactory nature, the results obtained demonstrating the distinct advantage that will accrue to the company when the whole of the bullion now produced is refined at the company's works, the extension of which is being pushed forward as rapidly as possible. The operation of refining has been considerably improved by a more complete and elaborate system of working, which, although involving additional expense, more than repays the extra outlay by the results obtained. By this means the unavoidable loss of silver and lead which occurs in the treatment of the bullion has been reduced by one-half in each instance; and, in addition, nearly double the amount of gold has been recovered in the process. The statement appended hereto shows that, notwithstanding the additional expenses above referred to, the cost per ton of bullion treated has been slightly reduced:—

Half-year ending 31st May and 30th	Bullion treated. Tons.	Production. Fine silver. Ounces.	Gold. Ounces.	Cost per ton of bullion.
November, 1890	7,154	1,762,116	463	£2 4 5½
31st May, 1891	3,989	642,604	365½	2 0 9
30th Nov., 1891	2,796	821,928	440	2 14 7½
31st May, 1892	7,969	1,684,210	1352½	1 14 5½
30th Nov., 1892	3,725	729,825	473½	1 19 3
31st May, 1893	10,994	2,857,722	1848	1 8 2½
30th Nov., 1893	11,309	3,154,233	1431½	1 12 1½
31st May, 1894	10,117	3,083,014	1341½	1 9 3½
30th Nov., 1894	11,070	3,667,555	2737½	1 8 8½

In connection with the quality of the fine silver now produced, the following extract from a letter received from Professor W. C. Roberts-Austen, of the Royal Mint, London, to whom your directors had appealed as an authority, is of considerable importance as proving its value in comparison with the silver produced in other parts of the world. It may be stated that the ingots of silver referred to were taken from three shipments, and were not in any way specially selected:—"The ingots weighed respectively 1049 ounces, 1018·25 ounces, and 1013 ounces, and contain in every thousand parts 998·9, 999·4, and 999·3 parts of silver. The silver is, therefore, in each case of a high degree of purity; the percentage of amounts of metals other than silver, and of impurities present in the respective ingots being only 0·11, 0·06, and 0·07. These ingots are, therefore, of a higher standard of fineness than is usually the case with commercial silver. The small amount of foreign matter present in the ingots is not of a nature to exert any prejudicial influence on the mechanical properties of the silver. Bismuth and lead are entirely absent, or are not present in quantities which can be determined by chemical analysis. There is a small quantity of copper and of iron present in each case, which can do no harm. There is evidence of the presence of oxygen, but the ingots are not at all brittle. The suitability of the silver for manufacturing into alloys with copper, such as are employed in industrial work, was then tested by converting a portion of the metal into ordinary standard alloy used for coinage (925). The metal forged well, was perfectly ductile, and was submitted to the severe test of rolling a bar into a thin strip. This test it stood admirably, the edges of the strip being perfectly free from cracks. I have no hesitation in expressing the opinion that the directors may have perfect confidence in the suitability of the metal submitted to me for any purpose for which silver is usually employed, such, for instance, as for the production of salts of silver, or for the manufacture of silver plate or ornaments."

Concentrating Plant.

Your directors have completed arrangements during the half year with the British Broken Hill Proprietary Company for the purchase from them of their concentrating plant, inclusive of the building. The greater part of this is required for that portion of the concentrating plant erected for the treatment of sulphides, and a contract has been let for its removal, which is being pushed on with all speed, and should be completed in two or three months. That section of the plant intended for the treatment of the carbonates is now almost completed. The work done so far, however, has been of a somewhat preliminary character, so that, as yet, insufficient data is to hand to arrive at any reliable result as to costs. The reports received up to the present show that the operation may be considered satisfactory.

The Mine.

Open-cut operations have been pushed along vigorously for the period under review, as will appear from the increased tonnage of ore obtained from this source, and the quarrying is getting much deeper, and more into the ore bodies. A considerable proportion of crude sulphides (some 800 to 1000 tons) are now being treated weekly in the furnaces at the mine, which amount may be gradually increased. This will probably augment the quantity of copper matte produced, and your directors are giving full consideration as to the most satisfactory method of dealing with the realisation of this material. A small iron foundry has been erected upon the north slag dump, and is proving of service in utilising to a more profitable extent the waste cast iron which, hitherto, had to be sent to local foundries to be recast when required. A diamond drill has been purchased, and is being placed in position in M'Bryde shaft, with the view of testing the deeper ground. The late heavy rains at the Barrier have replenished the company's reserves of water considerably, the benefit of which should be felt during the coming six months, a large proportion of the requirements during the past half-year having to be obtained from outside sources.

Future Prospects.

In this connection your directors desire to draw special attention to that portion of the report of the general manager, made at the request of the board, and dealing with this subject. His conclusions have been arrived at after careful examination, and point to the existence in the mine of 1,000,000 tons of oxidised ores of a payable character, and suitable for direct treatment. This is without taking into account a considerable amount of concentrating ores and sulphides of such a character as to be comparatively easy of treatment in the new concentrating plant, and also without making allowance for the possibilities of finding further ore bodies outside the main lode. These estimates do not include the large body of sulphides, the treatment of which still occupies the close attention of the company's officers. It is satisfactory to note that of late considerable attention is being given to the treatment of the sulphides in Europe, and your directors are in correspondence with several firms who have the matter in hand, and are experimenting in regard thereto.

Financial.

The financial position of the company may be considered highly satisfactory, and as foreshadowed last half-year, the economies inaugurated during the past 12 months having now been brought into effect, the result has been an appreciable reduction in the expenses, the cost of production being reduced from £2 12s. 6d. to £2 3s. 7d. per ton of ore treated. The net profit for the half-year amounts to £343,216 17s. 8d., of which sum £288,000 has been distributed in dividends, the balance to the credit of profit and loss account being increased to £600,435 7s. 5d. On November 30 the liquid assets, less all outstanding liabilities, amounted to a net sum of £545,882 1s. 1d.

General Manager's Report.

The following are extracts from the general manager's report for the half-year ending 30th November, 1894:—I have to report another successful and profitable six months' work. A much larger quantity of ore has been mined and treated than in any previous half-year in the history of the company, and, further, great reductions have been effected in the cost of mining and the metallurgical treatment of the ores, which enable us now to mine and treat at a profit a still lower grade of ore than heretofore. In the underground workings no new important discoveries of ore have been made within the past half-year, but the previously-discovered ore bodies have been drawn upon for the great bulk of the 246,541 tons of ore extracted from the underground workings, such ore having come principally from the main lode in the mine in proportions as the various characters of ore were required for the different metallurgical plants. The new body of ore which was found east of the main lode between Drew and M'Bryde shafts in Block 11 (and which was mentioned in my last half-yearly report) has not, on the whole, proved to be as high in silver as the first openings and work done in it at the time indicated; but it has, nevertheless, proved to be a valuable body of ore, and its average silver contents have been considerably above the general average value of ore treated.

The Surface.—Open-cut Work.

This branch of our mining operations have been carried out on a more extensive scale than hitherto, and there has been mined from the open-cuts during the half-year 107,178 tons of ore, or 29,019 tons more than was extracted in the previous six months. At the south end of Block 11 the large inclined shaft, started about six months ago at a point directly west of MacGregor (old) shaft, has reached a point about 40 feet below the bottom of the deepest of the open-cuts in the south end of the mine. A crosscut has been put in the eastward from the bottom of this inclined shaft, and has entered the upper portion of the old MacGregor ore body, which, as far as opened, gives a silver value of from 43 ounces to 50 ounces silver to the ton. The cost of mining ore from the open-cuts for the past half-year (including the removal of shaft machinery and other surface encumbrances, the extension of railway lines, the erection of ore bins in the cuts, together with all deadwork and the removal of all waste material, has been 10s. 6¾d. per ton, as against 16s. 1d. for the previous half-year.

Mine Furnaces.

During the half-year the 15 smelting furnaces on the mine have been running steadily, and doing good work. There has been smelted in this department 174,506 tons (net) of ore, as against 146,225 tons (net) for the previous half-year—an increase of 28,281 tons. The quantity of limestone used for the previous half-year was 47,543 tons, as against 34,372 tons for the last half-year—a reduction of 13,171 tons, although 28,281 tons more ore were treated in the same furnaces during the latter period. This extra tonnage of ore has been treated without additional labour, stores, or other important items of expense; and the great saving has been brought about in our smelting operations by a change in the blending of the ores, whereby a much larger percentage of siliceous and manganic iron ore has been used, the limestone being cut down frequently to about one-half. This has enabled us to put a much larger quantity of ore through the furnaces without additional labour, and has called for a greatly reduced quantity of coke and other supplies, whilst the extraction of lead and silver from the ores is as good as formerly. The cost of smelting in the mine furnaces for the past half-year has been £1 1s. 6¼d. per ton (net) of ore, as against £1 8s. 2d. per ton (net) for the previous half-year, showing a reduction of 6s. 7¾d. per ton of ore.

British Furnaces.

The three furnaces situated on the British Company's Mine, and leased by this company, have been running steadily during the half-year, doing excellent work. There has been reduced in these furnaces 43,777 tons (net) of ore as against 41,666 tons (net) for the previous half-year, or 2111 tons more for the period covered by this report. The same blending of ores has been made for these furnaces as for the mine furnaces; and although the cost of smelting in the British furnaces has, heretofore, been considered very low, that cost has been still further greatly reduced during the past six months. The cost for half-year ending 31st May, 1894, was £1 3s. 1¼d. per ton (net); the cost for the expiring half-year is 18s. 6d., or equal to 4s. 7¼d. per ton (including rent of furnaces, which amounts to about 10½d. per ton of ore treated).

Refinery.

During the half-year this branch of the metallurgical works has operated well, and done good work. There has been refined 11,070 tons of bullion, at a cost of £1 8s. 8¼d. per ton, as against 10,117 tons for the previous half-year, at a cost of £1 9s. 3½d. per ton, being an increase in the quantity of bullion treated of 953 tons, and a saving in the cost of treatment of 7¼d. per ton. Further, the gold saved in refining the bullion during last six months is 2737 ounces, as against 1341 ounces for the previous half-year, or more than double the quantity previously extracted. The percentage of gold contained in the bullion treated during the latest period differed but little from that of the preceding half-year, but a closer and more effective extraction of the gold from the crude bullion has been made. The extraction of gold from the bullion, when treated in our own refinery, may be regarded as very nearly a clear saving, for, had the 11,070 tons of bullion treated in the company's refinery been sold in England or on the Continent, we should have received no return whatever for the gold, the quantity contained in our bullion being below the quantity the refiners pay for. When it is remembered that we have not treated in our own refinery one-half of the bullion produced during the half-year, it will be quite evident that a considerable loss has been made in this direction for want of greater capacity, and it has been considered advisable to more than double the working capacity of the company's refinery immediately, which additions are being pushed on with as fast as possible.

The Product.

There has been mined and treated in the various metallurgical plants during the half-year, 328,095 tons (gross) of ore (including flue dust), producing lead and silver as per schedule, in addition to which there is on hand at Port Pirie about 11,000 tons of smelting ore; there has been added to the chloridising, concentrating, and smelting ore reserves on the mine (which is in the several ore bins, on smelter floors, and in transit to Port Pirie at this date) altogether about 17,000 tons more, making an actual production of ore for the half-year of close upon 354,000 tons.

Siliceous and Manganic Iron Smelting Ores.

A question has been raised as to whether it is advisable to use large quantities of these ores in our smelting furnaces, with a less quantity of limestone for flux, or to use a greater quantity of limestone, and reserve a portion of the iron ores for future use in connection with the treatment of sulphide ores. I may say, in dealing with this matter, that of all the oxidised ores remaining in the mine at the present time, there is an excess of the several characters of iron ores over all other characters of oxidised ores put together; and further, our siliceous iron ores, carrying as they do on an average but little more iron and manganese than is required to flux themselves, constitute one of our most important silver and lead-producing smelting ores at the present moment. By a free use of manganic iron fluxing ores (all of which carry some silver and a good percentage of lead) we make a fast running and cheap smelting mixture, to which may be attributed more than to all other causes put together, the great reduction in smelting costs during the past half-year. I would further state that the free and liberal use of these iron ores is, aside from their iron fluxing quality, practically indispensable in our smelting operations at the present time, for the reason that it is from these iron ores that we now obtain the bulk of the lead which it is necessary to have for economical smelting. It is, I am sure, well-known that our carbonate of lead fluxing ores are getting scarce, and, in my opinion, the company is especially fortunate in having in this mine, in such large quantities, a class of ore which contains, in the best possible combination, such a large percentage of lead and iron fluxing properties. It is what can only be regarded as a remarkable fact that, along the whole line of the lode, it is alone within the bounds of the three 40 acre blocks constituting the Broken Hill Proprietary Mine that this class of material is to be found in any quantity. There is nothing, on the other hand, in favour of reserving these manganic iron ores for future treatment, in conjunction with the sulphides. Not but that they would be desirable ores to mix with the sulphides, but it is now a pretty well established fact that the sulphide ores of these mines will not be treated alone in large quantities on the Barrier. It is quite evident that the sulphide ores of the Proprietary Mine cannot possibly be successfully and profitably reduced, alone, by direct treatment in blast furnaces. A preliminary dressing and concentrating will have to be resorted to, to rid the sulphides of a portion of their zinc, silica, and other objectionable ingredients, before they can, with success, be subjected to a heat-reducing process. This preliminary dressing and concentrating can, and no doubt will, be done on the Barrier, but the smelting of the concentrated material, which will require a good deal of fuel and manipulation, will have to be carried out at the seaboard, where fuel, labour, limestone, iron, and other important requisites are cheaper than here. In that case, it would not pay us to send our low grade manganic iron ores away from here, for a first-class iron ore can be purchased at Port Pirie at the present time, delivered at the smelting works, for possibly about what it would cost to mine our manganic iron ore here. (It must be remembered that the iron ore we are sending to Port Pirie at present carries a good percentage of silver and lead.) Therefore, it is in the best interests of the company to use its siliceous and manganic iron ores in such proportions as will reduce the cost of smelting to the lowest point, and give us the necessary supply of lead, for which we must look to the iron ores in a large measure hereafter. It is not only advisable that we should use a large percentage of these iron ores in order to reduce the cost of smelting and to increase the reducing capacity of the furnaces; but it is absolutely necessary to do so (1) to get the lead we require for fluxing purposes; and (2) to obtain the silver the iron ores carry. Whatever benefits would be derivable from blending these iron ores with our concentrated sulphides, those benefits and profits would be very small compared with what we are now receiving from the free and liberal use of our iron ores combined with our dry siliceous oxidised ores. In connection with the foregoing, the following figures are supplied, the same representing the general average analysis and assay of the siliceous iron and iron fluxing ores taken from the open-cuts during the half year, compiled day by day from rough "grab" samples:—

Siliceous Iron—
Lead, 14·715 per cent.; silver, 24·030 ounces; iron, 15·618 per cent.; manganese, 17·286 per cent.

Iron Flux—
Lead, 15·153 per cent.; silver, 3·214 ounces; iron, 18·253 per cent. manganese, 23·547 per cent.

Sulphide Ores.

During the half-year we have treated several lots of these ores by concentration in an experimental plant erected for that purpose, and the results were favourable. We obtained, on an average, from a little over 3 tons of crude sulphide ore, 1 ton of concentrated material, which gave an assay value of from 50 to 65 per cent. of lead, from 20 to 28 ounces of silver, and from 6 to 8½ per cent. of zinc per ton.

Present Condition and Future Prospects of the Mine.

In a special report, published with my ordinary report for the half-year ending May 31st, 1892, I gave, after very careful investigation, as an estimate of the quantity of ore remaining in the mine at that time, 2,000,000 tons of payable oxidised smelting ores, which would keep 25 smelting furnaces running at the rate we were then smelting for between four and five years. Two and a-half years have since elapsed, and we have mined and treated during that period about 1,280,000 tons. We have, however, within the time mentioned discovered two isolated bodies of ore, which, at the time of the preparation of the estimate, were not known to exist, and these discoveries have added somewhat to my former estimate; so that it is safe to say we have yet about 1,000,000 tons of payable oxidised ores left in the mine of a character and value suitable for direct treatment in the principal metallurgical works. Besides this, we have a large quantity of concentrating ore which can be reduced to a profitable smelting ore, and these quantities, together with the concentrated sulphides that will be obtained from the new concentrating plant, enable us safely to say that we have remaining in the mine at the present time sufficient oxidised ores (with what sulphide concentrates can be produced) to keep all our metallurgical plants running, at the rate we are now working, for two years, with still a fair prospect of finding other isolated ore bodies outside of the main lode, which are not taken into the foregoing calculation. The ores remaining will not contain as high a percentage of silver and lead as the ores heretofore treated; still, there is a considerable quantity of high-grade silver ore remaining in the mine, and the open-cuts will produce a better quality of all characters of ores in the future than they have done in the past. The ore, however, which will be produced from the underground workings will not be so good as it has been. During the past two years we have, in addition to doing a great deal of heavy construction and other extra and expensive work, and paying dividends, created a large cash surplus, besides having in reserve and paid for considerable stocks of coke and other expensive supplies; in addition to the foregoing, we have on hand at Port Pirie about 11,000 tons of ore, on which the cost of mining, transport, and handling has been paid, and there is also about 50,000 tons of concentrating, chloridising, and smelting ore piled up on the surface at the mine, on which the cost of mining and placing in reserve has been defrayed. From the foregoing—and when it is considered that we have now got through with very nearly all our expensive construction, and other extra work—with the mine, both in the open-cuts and underground, in the best condition it ever has been, and the metallurgical plants all in good order, and with the great reductions in the cost of mining and treating the ores which have been brought about during the past half-year, we can work a much lower grade than we have been. In estimating the quantity of oxidised ores remaining in the mine, I may say I am dealing only with the quality and character of ores that will pay ordinary expenses and dividends at our reduced cost of mining and treatment, with silver and lead at the average price which has obtained during the past half-year. Our mining, both above and below ground, is now nearly all done under the contract system, which is working satisfactorily.

Working Summary.

Showing gross quantities and values of produce, with net cost and net profit per ton of ore treated, for each half-year to 30th November, 1894:—

Half-year ending	Gross ore treated. Tons.	Silver prod'c'd. Ozs.	Lead prod'c'd. Tons.	Value per ton of ore treated. £ s. d.	Aver. cost per ton of ore treated. £ s. d.	Profit per ton of ore treated. £ s. d.
Nov. 1885	48	35,105	—	—	—	—
May 1886	1,103	144,104	—	—	—	—
Nov. 1886	10,397	871,665	1,999	15 2 5	8 15 4	8 7 1
May 1887	18,410	835,526	1,838	11 2 2	6 12 5	4 9 9
Nov. 1887	28,799	1,367,899	6,511	9 19 6	5 16 4	4 3 2
May 1888	39,789	1,835,737	6,773	9 7 6	4 10 5	4 17 1
Nov. 1888	64,336	2,990,455	9,885	9 8 7	4 7 7	5 1 0
May 1889	68,545	2,677,684	11,417	8 11 6	4 5 7	4 5 5
Nov. 1889	88,839	2,325,913	14,659	8 8 1	3 15 9	4 12 4
May 1890	173,912	3,856,311	15,399	8 8 9	3 18 0	4 10 9
Nov. 1890	209,912	3,872,546	14,938	9 7 7	4 5 2	5 1 11
May 1891	138,645	4,918,124	24,232	8 3 9	3 18 7	4 5 2
Nov. 1891	147,473	5,028,914	17,455	7 18 1	3 12 2	4 5 11
May 1892	180,852	5,754,940	26,643	6 11 11	3 11 1	2 17 10
Nov. 1892*	72,973	2,310,208	9,653	5 12 9	3 11 10	1 17 11
May 1893	250,463	5,978,194	21,731	4 15 0	2 18 10	1 17 2
Nov. 1893	260,247	6,535,232	25,879	4 8 9	2 13 10	1 14 11
May 1894	269,245	7,787,737	25,938	4 2 0	2 12 6	1 9 6
Nov. 1894	325,949	6,767,056	23,955	3 4 8	2 3 7	1 1 1
Totals ...	2,114,026	65,382,472	258,537	—	—	—

* The strike disarranged costs and profits for this half-year.

From the half-year ending November 30, 1885, down to November 30, 1894, £5,264,000 has been paid in dividends and bonuses, £125,000 placed to reserve fund, £375,107 5s. 8d. for depreciation, and £642,095 10s. 10d. for construction, making balance construction £266,988 5s. 2d.

MEETINGS OF MINING COMPANIES.

DOLCOATH.

Loss of £5100.—Difficulties with the Tehidy authorities.

THE meeting of the shareholders was held at Camborne, on Tuesday, Mr. M. H. WILLIAMS, J.P., presiding.

The accounts showed tin sales (390 tons 13 cwts. 11 lbs. at average of £36 15s. 3d.), after allowing £797 15s. 7d. for dues, an realised £13,562 6s. 2d., and other items brought the credit total up to £13,730 10s. 10d. The expenditure, which included £11,072 5s. 6d. for labour costs, £1437 1s. for tribute work, and £5989 14s. merchants' bills, amounted to £18,831 7s. 7d. There was consequently a loss on the three months' working of £5100 16s. 9d.

The CHAIRMAN said he would first express, on behalf of the committee and himself—and he was sure all the shareholders would join with them—their sympathy with Captain Josiah Thomas in his serious illness. His enforced absence was a loss almost irreparable, and he was sure they would pass a vote of sympathy with the family, and express the hope that he would shortly be restored to his usual state of health. (Hear, hear.) Captain Josiah Thomas was a good deal better. He had had a good many trials, and, like other people, after a certain age, he could bear only a certain amount, and the pressure on him recently had been too much.

Mr. F. HARVEY seconded, and the motion was carried unanimously.

The CHAIRMAN said that since Captain Josiah Thomas's illness they had had the greatest possible assistance from his three sons—three very able men—who had done their utmost during the misfortune. (Hear, hear.)

Captain ARTHUR THOMAS read, at the request of the CHAIRMAN, the

AGENT'S REPORT.

The engine shaft is sunk 16 fathoms below the 425 fathoms level. We commenced to drive east 6 feet above the bottom of the shaft, and that end is now driven 5¼ fathoms, the lode for the part driving on being worth £10 per fathom. New East shaft is sunk 11½ fathoms below the 425. The lode for the part sinking on is producing a little tin, but we think a better part of the lode is standing to the north, which we cannot conveniently cut through before reaching the next level, which we expect will be in less than two months. We shall then drive east and west from the bottom of the shaft so as to hole as quickly as possible to the 440 east of engine shaft, and to get under the rich tin ground eastward. We have commenced to sink a winze under the 425, 23 fathoms east of New East shaft, which is now sunk 3¾ fathoms, the lode being worth for 9 feet long and 6 feet wide, £50 per fathom. The total width of the lode at this point is upwards of 24 feet. The 425 east of new east which is being driven on the south part of the lode is 6 fathoms east of No. 2 winze, and is worth £30 per fathom. A much richer lode is probably standing to the north. About 15 fathoms west of Old Sump shaft we have of late been cutting south into the lode at the 425 fathoms level which so far as seen is worth £30 per fathom. The south part of the lode at the 400 fathoms level just over this is worth £20 per fathom. This seems to be an important feature, as we have not had much tin of value to the west of Old Sump for some time past. 338 west of Harriett's shaft is worth £10 per fathom. 314 west of Harriett's shaft contains low quality tinstuff. 327 west of eastern shaft is worth £25 per fathom. Winze under the 327 west of eastern shaft sunk 22¼ fathoms, and is worth for 9 feet long £75 per fathom. We are driving west of eastern shaft at the 325 fathom level by boring machine to lay open the ground for stoping. The 302 west of eastern shaft is worth £10 per fathom.—South lode, 375 west of Harriett's shaft is producing a little tin. 327 west of winze west of eastern shaft £12 per fathom. 278 west of Old Sump £20, 266 west of Old Sump £ 0, 254 west of Old Sump not of much value, 241 west of Old Sump £8 a fathom. The winze under the 220 south of engine shaft is sunk 8½ fathoms, and is worth for 9 feet long £20 per fathom. As already explained to the adventurers in the circular issued about a fortnight since, the returns of tin have been greatly lessened during this quarter by the extensive run which occurred in new east shaft. We are now sinking a new shaft in the granite to the north of the lode below the 364, and are also preparing to rise over the 425 fathom level. If, however, the proposed scheme for sinking a new perpendicular shaft from surface is carried out it will probably be found unnecessary to proceed with the projected work at new east.—JOSIAH THOMAS, JAMES JOHNS, JOSEPH TAMBLYN, EDWIN PRIDEAUX, GEORGE DAVEY, WILLIAM JAMES.

Captain ARTHUR THOMAS, in supplementing his report, said that if the proposed scheme for the sinking of the perpendicular shaft was carried through it would, no doubt, be found expedient, instead of sinking below the 364 to the 425, to discontinue that, and spend an equal sum, and, perhaps, a little more, in equipping the eastern shaft with faster winding machinery in order to enable them to deal with a larger quantity of stuff. Personally speaking, he thought the move for a perpendicular shaft was a move in the right direction, because it would put the mine on the same footing as other large modern mines. The advantages of such a shaft, equipped with most powerful and modern mining machinery, capable of dealing with a large output, were, as they would appreciate, very great. With the increased output, and the capability of drawing double the quantity of stuff, and increasing even that, they would be able to treat and work at a substantial profit ground which, under present conditions, would not pay. In addition to those advantages of a perpendicular shaft, they would be free from any of the uncertainty and risk that attended the working of a mine that had been so extensively worked as Dolcoath. He thought that what they wanted in Cornwall, in addition to a higher price for tin, was to put their houses in order and their mines more on a level with foreign mines. In Cornwall they had an almost unlimited supply of stuff, which ought to, and would, return handsome profits on the amount of money invested. (Applause.) Dolcoath was looking as well as ever. (Applause.)

Mr. F. W. THOMAS then read the following letter, written by Captain Josiah Thomas from Carbis Bay:—

I am pleased to inform you that my health has very much improved since I have been here, but my medical attendant strongly advises me not to attend the meeting of shareholders to-morrow. You will readily believe that this is a matter of deep regret to me, as I have always been present at every meeting for the past 30 years. I hope in a short time to be able to resume my usual duties at the mine. It is a matter for congratulation that for 25 years in succession we had continuous and probably unparalleled prosperity, but for the last 18 months, owing to unforeseen circumstances, we have had several rather serious mishaps, by falls of ground which could not have been prevented. We have already informed you by circular that the run which occurred in New East shaft afterwards turned out to be much more serious and extensive than we anticipated, so that this shaft, from which we formerly drew a large quantity of stuff, has been practically idle for the whole of the quarter. Fearing the possibility of some similar accident occurring at the engine shaft, we have put in some concrete arches at the 352 fathom level and above, which we believe will make that shaft thoroughly secure. By sending down and fixing the concrete for the arches, and also large quantities of timber, the drawing of stuff through the engine shaft has also been seriously interfered with, so that altogether our returns of tin have unavoidably been very much lessened. The price of tin this quarter has also been about £2 10s. per ton less than last, which makes a difference on the returns of nearly £1000. Most of you are aware that about the end of January a fire, the origin of which is unknown, destroyed the greater part of the account-house, but the principal mine books, which were in the fire-proof strong room, were uninjured. The rebuilding of the account-house is being proceeded with as rapidly possible by our own staff of men, so that the cost of restoring it will not be very serious. We are still spending a large sum of money in developing the mine by boring machinery, all of which, for the future welfare of the mine, ought to be continued. As you are aware, we have always carried on extensive exploring operations even when the price of tin has been low, so that when tin has advanced in price we have reaped the advantage of such a policy. The mine, on the whole, is looking just the same as at the last account, with the exception of the eastern part, which has considerably improved, the lode in the winze under the 327 being worth £75 per fathom. This lode appears to be standing to the north of all the levels below for a considerable distance to the west of the eastern shaft, but more will be seen as to this when the 352 west of that shaft is holed to the winze, which will probably be in about three months. If the proposed scheme for sinking a new perpendicular shaft and erecting the most modern and approved machinery is carried out, there is every probability of the cost of working being enormously lessened, and of the returns of tin being largely increased.—Yours faithfully, JOSIAH THOMAS.

The CHAIRMAN said they would see that a heavy loss had been made. The committee had approached the lord's agent, and asked him, for the third time, to forego the dues. But they were met with the most distinct "No"—(hisses). The committee felt very sore at the result. That "No" still stood in existence. They would have seen that Dolcoath had a very extraordinary scheme on foot. They were not in a position that day to say how big or how small that scheme was. When they found that the mine was getting into difficulties, and the price of tin was low, they realised that something must be done, and, with Captain Josiah Thomas, the committee thought their only chance was to seek for outside capital. They had gone into the market as it were to test that point, and he was very pleased to say that so far as the money part went they met with every success. (Applause.) At least, they thought so. Well, of course, the next thing was to approach the lord, to see what he could do in granting the new lease. Some years ago they had a desperate fight for a new lease, and he was sorry to say it had come to that point again. He hoped they would, however, never hear anything more about fines. The lord was willing to give a long lease, but the question was as to dues. His offer he (the Chairman, would not disclose, but it was such as the committee could not for one moment accept, and such as they could not advise the shareholders to accept; and, therefore, he should ask them to adjourn the meeting for a fortnight to give to the committee an opportunity of seeing whether they could not break ground and come before them with such terms as they could accept. All they could say was that it was a most critical time, and he did hope that the lord would see his way to meet the adventurers in a fair spirit, and they might rest assured that if he did not the thing was gone. The mines of Cornwall were on the brink of a precipice, and the least thing would throw them over. If they could carry out the projected scheme for Dolcoath it might be the means of setting the whole thing afloat again (Hear, hear.) Of course, they must distinctly understand that they were not in any way committed, and when they could put the thing in such a shape as would suit they would approach the shareholders, and lay every fact before them, and ask their opinion. The committee was not committed, and the shareholders were not committed. The only thing was the question of the lord. If they could deal with him, he thought the thing would go through. He proposed that the meeting be adjourned for a fortnight, when they would be asked to meet again to pass the accounts and consider what call was necessary. The call would greatly depend upon the arrangement made elsewhere. (Applause.)

Captain RABLING, J.P., C.C., seconded.

Mr. A. LANYON said the firmness with which the Chairman promised they would deal in the matter of dues with the lord, would be endorsed by everyone in that room—(applause)—and it would be emphasised by the Press very clearly. He did not wish at that moment to speak too strongly—he admired the manner in which the Chairman had restrained himself—but he should not hesitate to use stronger words if necessary. He believed the adventurers would loyally stand by the committee's judgment, and if, after approaching the lords, they (the lords) were obdurate, the County of Cornwall would not refrain from declaring most emphatically that the burden must rest on the lords. It would not be only a time for speaking but for acting. If Dolcoath was closed the others would follow, and the mining industry in West Cornwall would be completely wiped out.

Mr. J. VIVIAN, J.P., C.C., as a representative of Camborne, echoed what Mr. Lanyon had said. Unless something was done to reorganise the mine and develop the property, the population of 15,000 in Camborne would have to seek livelihoods elsewhere. If Dolcoath was not worked the town would be ruined, (Hear, hear.) The committee had his sincere sympathy. (Applause.)

Mr. HENRY ROGERS was sorry that Captain Josiah Thomas was ill, and added that in future he would not have so many irons in the fire, and be content with managing fewer mines. He advocated that they should have a similar arrangement as to dues as at East Pool—either 1-18th dues, or one-quarter profits. The East Pool committee always found the lord ready to consent to any reasonable proposal, and he regretted that the Dolcoath committee never seemed to be able to work amicably with the lord or his agent. He pressed for further particulars as to the Limited Liability scheme, and hinted that good management, strict economy, and constant supervision were necessary to make the mine a success. The committee might, with advantage, be strengthened, and he hoped it would not be such a close borough as it had been in the past.

Mr. C. V. THOMAS said the shareholders would not be bound in the least until they had had an opportunity of considering and discussing the proposed scheme. He thought Tehidy would see that the salvation of Cornish mining depended almost entirely upon a satisfactory solution of the Dolcoath lease. (Hear, hear.)

Mr. ROGERS moved, and Mr. LANYON seconded, that an immediate issue be made of a list of present holders of shares, which was carried.

The motion for the adjournment of the meeting was then put and carried.

A hearty vote of thanks to the Chairman, which was warmly accorded, closed the meeting.

TINCROFT.

Loss of £542.

A 16-weeks' meeting of the adventurers in Tincroft was held on the mine, on Tuesday,—Mr. F. HARVEY, J.P., presiding. Before commencing the business he proposed a vote of condolence with the widow of the late Mr. John Jose, who was a member of the committee of the mine.—The motion was carried unanimously, and it was agreed that the filling of the vacancy should be deferred to the next meeting.

The statement of accounts showed on the credit side copper ores sold, £497 13s. 7d.; arsenic, £1799 10s. 5d.; tin ores, £7925 8s. 10d.; slime tin, £131; discounts, £98 9s. 6d.; carriage, £11 7s. 6d.; total, £10,463 19s. 5d. The labour costs amounted to £7048 2s. 11d.; merchants' bills, £3194 2s. 11d.; and the other expenditure brought up the total to £11,006 4s. 8d. The loss on the 16 weeks amounted to £542 5s. 3d., and when this had been met out of a balance of £1870 4s. 10d. from the last account, there would be £1327 19s. 7d. to carry forward to the next account.

Captain TEAGUE read the following manager's report:—

South Tincroft.—We have completed the trip plat at the 342 fathom level at Martin's east shaft, and brought down the skip road, and hope to cut the lode in the crosscut at this level during the coming sixteen weeks. In the 310 fathom level driving west of crosscut west of Martin's east shaft we have about 8 fathoms to drive to intersect Harvey's engine lode. In the 310 fathom level driving west of crosscut east of Martin's east shaft the lode is worth for tin £9 per fathom. In the 300 fathom level driving west of crosscut west of Martin's east shaft on the south part the lode is worth for tin £8 per fathom. In Downright shaft sinking below the 300 fathom level the lode is large, and worth for tin £12 per fathom. In the 320 fathom level crosscut west of Downright shaft we have driven 40 fathoms, and cut Dunkin's lode, which is 20 feet wide, composed of tin, capel, iron, and fluor spar. From the general appearance of the lode we have reason to believe that rich bunches of tin will be discovered as we open it east and west and now worth for tin £10 per fathom. There is no change in the 2 2 fathom level crosscut driving north and west of Downright shaft.—North Tincroft: We have completed the No. 1 winze to the 174 east of Willoughby's shaft. This winze has been worth on an average £20 per fathom for tin, arsenic, and copper for the whole distance. In No. 2 winze east of Willoughby's shaft the lode is worth for tin, arsenic, and copper £18 per fathom. In the winze sinking below the 154 fathom level west of Willoughby's shaft the lode is worth for mineral £15 per fathom. We have cut several branches of lode in the 154 fathom level crosscut north and east of Tyrie's engine shaft during the past month. In the 154 fathom level driving east of crosscut west of old Tincroft shaft on the north lode the end is worth for tin and arsenic £9 per fathom. In the 154 fathom level driving west of crosscut west of Old Tincroft shaft on the north lode the end is worth for tin and arsenic £8 per fathom. In the 120 fathom level driving east of Willoughby's shaft the lode is worth for tin and arsenic £11 per fathom.—WILLIAM TEAGUE.

Captain TEAGUE, in supplementing the agent's report, thought they had every reason to congratulate themselves on the prospects of the mine. The report was, on the whole, more encouraging than for some time. The Highburrow lode around Martin's east shaft had, unfortunately, fallen off very considerably. What the result of the development of that lode would be in future they could not say, but certainly it had been very disappointing in the past 12 months. In the Downright shaft the lode had considerably improved in appearance, and the prospects were all they could desire, though at present the lode was poor. But, from the general appearance, it was much better than anything they had had in the last 20 years in the neighbourhood of that mine in sinking. The most important thing in the mine, however, was the cutting of Dunkin's lode in the 320 crosscut south. They had cut into it rather more than 20 feet. For the first 6 feet it was composed of a good deal of iron and a little spar. Then they had a bise course, which was not very productive of tin, and after that 2½ feet of spar, iron, and a little peach, which was considered to be the "cab" of the lode. They continued driving, and in the next 8 feet discovered they had a better lode than they had seen before, and to-day the lode in that part was the most valuable part of the lode. It was not very rich, but as the report stated, they had a strong reason to believe that good deposits of tin would be met with. At present it seemed to be a junction of two lodes, from the fact that the lode was so wide.

The CHAIRMAN, in moving the adoption of the accounts and report, said that there had been a reduction of £800 on the labour costs, compared with the previous sixteen weeks, and the total debits were less by £360 than on the last occasion. Copper ore produced about £20 less, but they had an increase in the arsenic of £350, and this was really the grand feature of the mine, and which enabled the managers and committee to place the accounts before them with so small a loss. The quantity of tin sold was a few tons more than on the last occasion, though the amount realised was less by £700 than at the last account, the price having decreased £4 16s. 11d. per ton. They might consider themselves fortunate in having so small a loss, and great credit was due to the purser for his accounts, and to Captain Teague for his report.

Mr. E. HEARD seconded, and the motion was carried.

CARN BREA.

Call of £1 per share.

A 16 weeks' meeting of the shareholders in Carn Brea was held on Tuesday, Mr. FRANK HARVEY, J.P., presiding.

The accounts showed black tin sold, £7742 19s. 8d.; slime tin, £205 6s. 3d.; tin halvans, £167 11s. 4d.; sundries, £3 2s. 7d.; employers' liability claims, £48 1s. 1d.; and discount, £102 15s. 11d.; total, £8969 16s. 10d. The labour costs amounted to £8111 5s. 10d.; merchants' bills, £4476 14s. 5d.; and other expenses bringing up the total expenditure to £13 537 15s. 6d. The loss on the 16 weeks amounted to £5267 18s. 8d., and, with a deficit on the last account, the total balance against the adventurers amounted to £5534 19s. 3d.

The CHAIRMAN said he had been requested by the committee to refer to the great loss sustained by the death of Mr. Jose, who was a very good member, as, besides being a practical miner, he was a good business man in every way. (Hear, hear.) He moved that the meeting express deep regret at the death of Mr. Jose, and sympathy with Mrs. Jose in her bereavement.

Mr. E. G. HEARD seconded, and the motion was carried.

The CHAIRMAN stated that it had been considered desirable to leave until the next meeting the filling of the vacancy caused by the death of Mr. Jose.

Captain T. WHITE read the report signed by the agents—Messrs. J. Daddow, William Thomas, and John Penhall.

HIGHBURROW EAST:—Since the last meeting we have driven the 335 fathom level cross-cut south of Harvey's shaft 16 fathoms and cut Highburrow lode. We are now driving east and west of cross-cut by boring machines on its course, and have opened on it 13 fathoms; the lode for this distance has produced low quality work for tin. The lode in the eastern end is improving; it is the full size of the end, strong and well defined, with a very promising appearance, and producing good stones of tin. Our opinion is we shall soon meet with a productive lode in this end. The run of tin ground passed through in the level over (310) is about 20 fathoms in advance of the present end. We consider this a good point, and have reason for expecting to meet with a good discovery. The driving of the 334 fathom level west is also important; the lode in this end is of a promising character, and producing stones of tin. In the upper levels, between Harvey's shaft and Poddier's, the lode was very rich for tin for a long distance, and it is the continuation of this rich run of tin ground we hope to meet with in driving this end west, and communication will thus be effected with the 325 fathom level east of Highburrow west shaft. The 322 fathom level is driven east of cross-cut south of Harvey's shaft 19 fathoms by boring machine. This distance has been driven since the last meeting. The lode throughout has produced low quality work for tin, but not to value. We have about eight fathoms more to drive to reach the point where the lode became productive in the 310 immediately over. The 310 fathom level is driven east of Harvey's shaft 98 fathoms. Lode worth £15 per fathom. The last 85 fathoms driving of this end have been through good ground, the average produce of the stuff for this distance being 6 lbs. of tin to the ton of stuff. It is the continuation of this productive ground that we are expecting to meet with in the 322 and 334 fathom levels east. We have two stopes working in the bottom of the 88 fathom level east, and one in the bottom of the 180 fathom level east. Lode worth in each £9 per fathom.—Highburrow West: Ten points average £13 8s. a fathom, the highest £20, the lowest £3.—Old Sump: The 144 fathom level is driven east of shaft on Druid north lode 11 fathoms; in this distance we have passed through some profitable ground. In order to prove and open up this ground below this level we have recently commenced to drive the 256 east end by boring machine. The lode here is improving, and is worth £3 a fathom. We must now be very near the first run of tin ground passed through in the 244 fathom level, and hope at an early date to open up some good stoping ground here, and so increase our returns from this part of the mine. We have 10 pitches working on tribute, at tributes varying from 11s. to 13s. 4d. in the £. Apart from the very low price for tin, we have had several hindrances to contend with during the past quarter, which have very much interfered with our working; but with it all, we consider the prospects of the mine have very much improved of late, especially in the Highburrow east, where, as already mentioned, we have cut the lode in the bottom level (334) south of the elvan, and the prospects of meeting with a good discovery in this level at an early date are, we consider, most hopeful.

In supplementing the report Captain WHITE said they were sorry to have to meet the shareholders with the loss of £5269. But he was glad to say that their prospects were very much better than they were 16 weeks ago. At that time their crosscut at the 334 was south of the shaft 4 fathoms. That crosscut was continued, and he was happy to say the lode had been cut, though it was not so rich as they should like to see it. But he believed it would improve as they extended east and west. In the 310 the lode, when they commenced to drive, was comparatively poor and disordered, but after driving 5 fathoms they met with a good lode, and ever since the end had been opening very satisfactorily, the average produce being 56lbs. to the ton. He believed he could say with safety that if all went well they would meet at the end of 16 weeks under much better circumstance. (Hear, hear.)

The CHAIRMAN stated that the committee had, as requested by the last meeting, carefully considered the questions raised by the Tehidy authorities as to the terms of the lease. Although the committee believed they had a good case, yet looking at the depressed times and the uncertainty of the law, they thought it best to come to terms, and the matter had been settled. For the future the 5s. per ton on the carriage of tin and the quarter part of the divisible balance would be dealt with from the landlord's point of view, but up to the time of settlement their point of view would be taken, and the accounts would, therefore, be undisturbed. By the view the committee had taken, £1650 had come to the shareholders instead of going to the lord. But the lord had agreed to waive all claim to that. They had not got all they wanted, but the £1650 had been given them, and although the committee had good reasons for making the claim, possibly they had done the best thing in the interests of the shareholders by settling the matter. (Applause.) On the 16 weeks the labour costs had been reduced £1900. The committee and officials had had an anxious time in dealing with the men. But the manager and officials had set them an excellent example by cutting their own salaries 20 per cent. altogether, which was a large reduction on any man's salary. During the quarter tin had dropped £4 per ton, and that meant £969, which was in itself a serious item. As they now had the lode in the 334, he saw no reason why they should not get such rich deposits as they had had in the past. In the coming quarter their loss would be less if only their present returns were maintained, as the reduction of wages would be felt over all the 16 weeks, and the merchants' bills would be only three months. He moved that a call of £1 per share be made in accordance with the recommendation of the committee, which would leave them £160 to the good.

Mr. HEARD seconded, and the motion was carried.

NORTH QUEENSLAND MINES AGENCY, LIMITED.

The sale of the Black Snake property approved.—The brilliant prospects of the company.

A meeting of the European members of this company was held at Winchester House on Wednesday, for the purpose of considering a circular in which the London trustees announced the receipt of the following cable from the directors in Australia:—

> Black Snake freehold, a *bona fide* offer has been made from a very powerful syndicate, £200,000, one quarter in cash, four months to complete purchase. Will accept, provided the English shareholders agree to the terms of sale at the price named, will yield a profit of 150 per cent. on the capital. A company with a capital of £300,000 will be formed locally to continue the development.

Mr. R. J. Twyford, one of the trustees, presided.

The Secretary (Mr. Arthur L. B. Kerr) having read the notice convening the meeting.

The Chairman said: Gentlemen—The task that has been assigned to me to-day as trustee of the North Queensland Mines Agency is an extremely important one in the interests of yourselves—the English and Continental shareholders—and it is, therefore, my desire that you will give me your earnest attention while I lay before you the facts bearing upon the cable which has been read to you. Before proceeding with the matter of the cable I should like to say that I propose not only dealing with this, but also to give you as concise a statement as possible from the information supplied to us by the directors in Brisbane as to the business of the company generally, and I trust I shall be able to give you such information as will enable you to form a practical idea as to what seems to me the magnificent future of this company. With regard to the cable, the effect of it is that a *bona fide* offer has been made to your directors for the purchase of the Black Snake property for a sum of £200,000, to be paid as to £50,000 in cash and £150,000 in shares, by a powerful syndicate with a capital of £300,000, and your directors are desirous of taking your opinion in this matter. To assist you to do this I will give you some particulars of the property, which are taken from the half-yearly report issued in June of last year. The Black Snake property is a freehold gold field in the Gympie district, divided in to 25 blocks by Government survey, with an area of 1889 acres. It contains about 14 gold-bearing reefs, which yield also vast quantities of copper and silver. The first of these reefs are the Victoria and Eily. These have been well proved by your company; numerous shafts have been sunk, and there is every probability of finding gold below the water level yielding 6 ounces to the ton. On the Rose, Thistle, and Shamrock reefs 12 shafts have been sunk, the greatest depth being 120 feet, and the crushings averaging from 1 to 2 ounces of free gold. The mining engineer's report says:—"The pyrites below water level contained 6 ounces of gold, and a large quantity of silver per ton of ore." The Mariner's reef has also been extensively proved by five shafts, which have been sunk to a depth of 50 feet. The reef is 2 feet thick, and at the 80 feet it is widening to very rich, although refractory, ore. Here the lode changes to pyrites, containing large quantities of gold and silver; a few feet deeper the lode is a complex kind of copper pyrites of extraordinary richness. Assays made by the Government Geologist from concentrates gave 3 ounces 1 dwt. gold, 250 ounces silver, and 30 per cent. copper. From tailings, 9 dwts. 19 grains gold, and 5 ounces 4 dwts. 12 grains silver. Assays have been made in Brisbane, Sydney, London, and Freiburg, with the result that the gold gave from 12 to 27 ounces, silver from 180 to 306 ounces, and copper from 25 to 42 per cent. The average returns from battery crushings of stone from above water level gave free gold 1 ounce 14 dwts. 2 grains per ton. In the Grand Old Man, Homeward Bound, and Britannia reefs, trial crushings yielded from 15 dwts. to 2 ounces per ton, and average samples assayed over 2 ounces. In the Forrester and Pembroke reefs the stone obtained from above water level averaged over 1 ounce of gold per ton. The crushings from the Mount Terrible reef have been from 2 to 8 ounces of gold to the ton, silver from 110 to 128 ounces, and copper from trace to 10 per cent.; lead, from trace to 35 per cent.; and bismuth a trace. The engineer states that "this block alone will be sufficient to yield handsome returns on any amount of capital judiciously invested therein." In the Prince and Princess of Wales reefs crushings from the 50 feet level gave a return of nearly 2 ounces of gold per ton, and the engineer states that these two grand reefs could keep the biggest mill in Australia constantly at work on payable stone for years. Besides these reefs, which contain gold, copper, and silver, the directors place great reliance upon three copper lodes on the same property. They have all been proved. The names are the Peak, Mount Coora, and the Mount Clara lodes. Besides these there are miscellaneous reefs which have not at present been proved, but which all show more or less richness in free gold. The mining engineer further reports that, taking into account the immense network of proved reefs to be opened up to water level, there are millions of tons of payable stone virtually in sight on your property that can be made to yield their riches by ordinary gold-saving methods. The official and non-official reports by eminent engineers and mining experts all agree in pronouncing the Black Snake district as possessing extraordinary mineral wealth, and embracing the richest gold-bearing country in the district. This, I think, will give you an idea as to what a marvellous property this is, and what a future it has. (Applause.) It is upon the proposed sale that your directors desire your opinion. I should like to point out that you are not really parting with your property, but that you retain more than half interest in it, and that it will be worked, not at your expense, but at the expense of those who take up the properties, at a profit the magnitude of which it is impossible to estimate. I will now give you a short account of the affairs of the Queensland Mines Agency. The objects and aims of the company were the organisation, in conjunction with British mining investors, of a responsible and workable agency, in order to place mines of a value approved by themselves before English investors, and to remove those difficulties and delays experienced by British investors in dealing in mining shares arising from a lack of reliable information, and sometimes from a supply of erroneous information. It was contemplated to form syndicates for working these approved mines and promising mineral lands, then reselling the same to companies when the value is ascertained. I will now give an account of what your directors have done in carrying out the original views of the company. They have acquired the Black Snake property, 2650 acres of freehold mineral lands near Gympie, called the Lennox and Lamark freeholds, and sufficiently large and rich to employ the capital of several companies, and the company have also interests in many West Australian leases, the sale of which they are negotiating. They have also shares in mines in West Australia and Queensland, estimated at the least to have the face value of about £150,000. This, with the £150,000 to be recived by the sale of the Black Snake property, in the event of the purchase going through, gives a total of £300,000 in shares. There will also be considerable sums in cash and shares if the West Australian leases to which I have referred are sold under the negotiations which are now pending. But the important fact to you, after all, is not only the holding of the properties, but also the dividends paid by the company. There is an old saying that "the proof of the pudding is in the eating," and the eating has proved very satisfactory so far, as you will admit, when I remind you that in June, 1894, a dividend of 10 per cent. was paid, and in December, 1894, one of 25 per cent. At the present time I have every reason to believe that the profits made by your company quite recently will enable your directors to declare a similar dividend in June next as was paid in December last, while, if the present sale be effected, the company will be placed in a position to pay an enormous dividend. Before concluding, I cannot refrain from taking this opportunity of pointing out that the success of this company has been largely due to the policy of your directors, and particularly your managing director, Mr. D. G. Macfie—(applause)—and I am sure they would not have cabled us on this occasion unless they were convinced that the operation would be attended with satisfactory results. (Applause.)

Mr. J. L. Higgs said the trustees, after a careful consideration of the matter, had come to the conclusion that the shareholders could not do better than authorise them to cable to the directors assenting to the sale. As the chairman had pointed out, they would hold £150,000 shares out of the total of £300,000. They would have a working capital of some £50,000 for the development of the property, and the return on the 150,000 shares which would be held by this agency should be very large within a short time. He moved "That the trustees cable the directors of the company that the English shareholders authorise them to accept the offer of £200,000 for the Black Snake property, payable £50,000 in cash and £150,000 in shares."

Mr. Chater suggested that the 150,000 shares should be distributed among the shareholders of the agency. He added that, as an old Queenslander, he knew the directors of the company, and could assure the shareholders that they could very safely leave their interests in the hands of those gentlemen. (Hear, hear.)

The Chairman said it would be for the directors to decide what should be done with the shares.

Mr. Benjamin seconded the resolution.

Mr. Backhouse asked whether the profits mentioned by the Chairman, independent of the proposed sale, would be sufficient to maintain the dividend paid in June.

The Chairman replied that, independent of the sale, the profits made were more than sufficient to maintain that dividend. (Applause.) In answer to another question, he said there was no doubt the shareholders would have an opportunity of subscribing for the shares in the new company if they desired to do so.

The resolution was then put, and carried unanimously.

A hearty vote of thanks to the Chairman and his co-trustee closed the meeting.

TRANSVAAL AND GENERAL ASSOCIATION, LIMITED.

An excellent year's work.—A dividend of 10 per cent.

The first ordinary annual general meeting of the shareholders in the Transvaal and General Association (Limited) was held on Wednesday, at the Cannon street Hotel, the chair being occupied by Sir Horace Farquharson.

The Chairman said: Ladies and gentlemen—In meeting you today I have the pleasure to tell you that, although this is our annual meeting, and we show a very satisfactory result, it will be considered more satisfactory still when I point out to you that the profits we have made have been derived from about six months' working. It is only six months ago that Mr. Hamilton Smith went out to Johannesburg to look after your interests, and you all know that in every company it takes a considerable time, in the first place, to get your money called up; and, secondly, you cannot begin in a financial company of this kind, connected as it is with South Africa, to make profits at once, because it takes time to acquire interests in the different undertakings that it is considered desirable to invest money in. Mr. Hamilton Smith went out to Johannesburg in August last year, and although he pursued, you will be happy to hear, an extremely conservative policy, yet he was able to take an interest in different businesses which have resulted up to the date of the issue of this balance-sheet in a gross profit of £31,000, and a net profit for dividend purposes—the warrants are ready, and will be issued to you this evening—of over £18,000. Although, upon a capital of £185,000, it appears like paying you a dividend of 10 per cent., if you will take the trouble to notice the dates upon which the different calls were made—bringing up the total capital to £185,000—you will see that the dividend we recommend to you to-day amounts, practically, to a little over 13 per cent.—I think it amounts to 13½ per cent.—which is not a bad return for only six or seven months' work. (Applause.) Gentlemen, I wish to say everything that is pleasant at once, and, therefore, I will give you another piece of information—viz., that the profit is really what we have actually realised, because we always take our investments at cost price until we sell them. There is no doubt whatever that if we were to-day to realise the different interests we hold we could show a much larger additional sum than the profit shown in the balance-sheet. (Applause.) I will now turn to the question of expenses, which some of you may think somewhat high. (Hear, hear.) The first item of expenditure is the preliminary expenses, amounting to £1262, which will not occur again. However large a business the company may do, most of the other items will practically remain the same. As I believe a good many of you are large shareholders in the Exploration Company—of which this company is one of the children—you will see that the items referring to the Exploration Company go to the profits of that company, in which you are interested. You will, therefore, see that you are giving a little lift to the parent company, whilst you are making a good deal of money yourselves. Mr. Hamilton Smith will, I have no doubt, tell you that whilst he was in Johannesburg he was extremely careful, and that he feels that what interests we do hold are of a very conservative nature, which he hopes will turn out profitable, as they have done to a large extent already. The sundry advances, which stand in the balance-sheet at £150,899, are all "gilt-edged," consisting of loans to the tip-top enterprises in South Africa. The sundry debtors stand at £2283, which amount has been mostly repaid since the balance-sheet was drawn up. I must now allude to the paragraph in the report which refers to the Compagnie Française de Mines d'Or et d'Exploration. This is a company which has been formed in Paris with a present paid-up capital of £400,000. We are in close connection with this company, which is likely to prove a great success, and the connection, we hope, will be of mutual advantage. As you know, Paris is now almost the chief market in connection with African mining enterprises. I hope you will be pleased with the year's working, and trust that if we meet here next year I shall be able to tell you that we have made a larger profit than this year. I beg to move: "That the report of the managers, with audited statement of accounts, including balance-sheet and profit and loss account to January 31, 1895, as presented to this meeting be, and the same is hereby received, approved, and adopted." (Applause.)

Mr. Francis A. Lucas seconded the resolution, which was then put and carried unanimously.

The Chairman then moved: "That a dividend of 10 per cent. on the paid-up capital of the company recommended by the managers be, and the same is hereby declared and authorised to be paid."

Mr. Lucas also seconded the motion, which was put and carried.

Mr. Pratt proposed the re-election of the auditors (Messrs. Deloitte, Dever, Griffiths, and Co.), which was also carried unanimously.

Mr. Hamilton Smith, in response to an invitation to address the meeting, said he had hoped when the company was formed to go out immediately to South Africa. Unforeseen circumstances, however, prevented him from arriving in South Africa until September. This he might say without vanity was a very unfortunate thing for the interests of the company, for had he been able to go out earlier the accounts presented that day would have been much more satisfactory in the way of profits. Prices began to move very rapidly upon his arrival in the Transvaal; but he did not touch any business without having carefully examined it, and he was exceedingly regardful both of the company's interests and also of its reputation, for a good reputation was worth more than large profits. The investments made on behalf of the company were on the most conservative lines, and not a penny had been invested except in cases where it was thought that the intrinsic value of the properties was in excess of the amount paid for them. So far the company had run no moral risks, while its financial risks had been very slight indeed. As the Chairman had remarked, a very considerable sum could be realised on securities of the company; but he certainly thought it better not to reckon the gain as money until the cash was safely lodged at the bankers. (Hear, hear.) He hoped to go out again in September, and he hoped to have the pleasure of welcoming them once again in about a year's time, when he hoped there would be a similarly satisfactory state of things to record.

Mr. Farrant proposed a hearty vote of thanks to the Chairman for presiding, and to Mr. Hamilton Smith and the other directors for the magnificent way in which they had conducted the business of the company during the period covered by the report. So long as the company was in its present hands, the shareholders would have every confidence in its future. (Applause.)

Mr. W. Morris, jun., seconded the motion.

Mr. Pratt also expressed satisfaction with the balance-sheet.

The resolution was then put, and carried by acclamation.

A brief acknowledgment from the Chairman terminated the proceedings.

LADY LOCH GOLD MINE.

The property opening up well.—Some valuable reef discoveries.

The first ordinary general meeting of the Lady Loch Gold Mine (Limited) was held on Wednesday, at the Guildhall Tavern, E.C., Mr. Graham King presiding.

The Secretary (Mr. Charles C. Rawson) read the notice convening the meeting.

The Chairman said: Gentlemen—You are aware that this is the statutory meeting, which we are bound to hold by Act of Parliament. You will not, however, be surprised that we have not very much information to give you, but what we have is good. In the first place we have appointed Mr. J. S. Read local secretary to the company; he was highly recommended to us, and we think we have got a very high class man. We have also confirmed the appointment of Mr. McCracken as mining manager, and we think we have secured in him a very excellent manager. I am sorry to say that there is a telegram this morning from Lord Douglas to say that he is unwell. He would have attended this meeting with a great deal of pleasure had he been able to do so, and he expressed regret that he is unable to be present. The communications we have had from the other side have necessarily been by cable, and not as full as we should have liked, or same, as we could have received by letter. We have done some very good work, and I think the very best thing we have done in the interest of this company is that we have acquired the Lady Forest Mine, a valuable property adjoining our own, and one partially developed. We have acquired it on the most favourable terms, and have thus practically doubled our property. Mr. Gorrie, who has an intimate knowledge of the property, is in the room, and he will tell you what his opinion of its value is. We have also agreed to join the United Mines Ores Reduction Company, in conjunction with other companies in the neighbourhood. By this means, instead of each company putting up a plant of its own, there will be a combined mining plant, which will thereby save expense in management and cost of reduction. I do not know that I have anything further to say except to read to you the last letters and reports we have received. Under date of February 2, the mining manager reports:—"The main shaft has been sunk 13 feet for the week, making total 109 feet from brace. There has been a good change in the reef during the last 6 feet, the reef being now 4 feet thick, well-defined, and widening as we go down. The main feature of the change is that the stone is of a better class, with gold well through it, and also that the gold is coarse and shotty; and as we are now sinking vertically on the reef, it speaks well for it when we begin to drive. Judging from the appearance of the reef, I have every faith in it going down to great depth, and I am of opinion that better gold will be got as depth is attained." Mr. Read, the local secretary in Perth, writes under date February 15: "I have just received the following report from the mine manager, Mr. McCracken: 'The main shaft has been sunk for the week 6 feet, making a total of 115 feet from brace. The sinking has been slow on account of the hardness of the country, and also from the fact that we are carrying nearly 6 feet of reef down with us. During the last few feet the stone has altered in appearance, and now shows much coarser gold than any previously found in the mine. Water is making at the rate of about 10 gallons per hour, and I would suggest the advisability of putting up a small condenser, as the mine will now have a sufficient quantity of clean water to keep it going.'" By condensing our own water we shall save £4 per week—the sum we have at present to pay for water. That is, I think, all I have to say, but I shall be glad to answer any questions.

Mr. Gorrie said: Mr. Chairman and gentlemen, I must say I am better acquainted with the development of the Lady Forest than with that of the Lady Loch, although I know the latter thoroughly well. Still, I have never been down below in the Lady Loch for purposes of examination since they made any development. The Forest I knew from the start up to November last, and when I was there in the latter month they had something like 700 tons of stone at grass, and I am quite within the mark when I say that it is worth 3 ounces to the ton. They had also an opening made on the surface 280 feet long, and from 5 feet to 10 feet deep, exposing a lode from 5 feet to 8 feet thick, and a shaft at each end of this cutting—one down 34 feet on the south end and one on the north end down between 50 feet and 60 feet, with a similar lode from 4 to 5 feet thick in the bottom, and carrying very good gold. I reckon that you have in the mine 700 tons at grass, and at least from 2000 to 3000 tons in sight ready for breaking up. The Lady Forest is a mine I have a very great deal of confidence in and I believe it will develop into a splendid property. It is well known to all the experts on the field, and I never heard a bad account of it from any of them. They all speak also very highly of the Lady Loch, and I congratulate the shareholders heartily in possessing such a property, which I know to be a good one. I believe there is another reef further east than the one they are working, because I have seen some good specimens that were got higher up the ridge. A reef cannot shed stone higher up a hill; it must come down; so that the fact that good stone has been got at the back of the reef, makes me believe that another important reef will be discovered higher up. There is also alluvial gold on the surface there; but it has been kept quiet, unless the alluvial men should rush in at once and knock about the surface. I, myself, picked up a piece of the alluvial. That is all I think I have to say about the Lady Loch, but I shall be pleased to answer any questions.

General Edward Sim, R.E., enquired how far the railway was finished, and how far distant the mine was from Coolgardie.

Mr. Gorrie replied that the railway had now been finished as far as Southern Cross, while the mine was about 115 miles from Coolgardie, and 2½ miles from the railway station.

The Chairman remarked that had it not been for Lord Douglas the property would never have come into the possession of the company. It was first offered to Lord Douglas, who offered it without any profit to himself to the company. (Hear, hear.)

A Shareholder enquired whether the contracts had yet been signed.

The Chairman: Yes; and the money paid. All is in order.

A Shareholder called attention to the necessity of making clear to the public the distinction between their own Lady Forest and the property of that name in the Murchison district.

The Chairman said the two properties were 600 miles apart, but it was highly necessary the public should distinguish between them.

A vote of thanks to the Chairman concluded the proceedings.

Koffyfontein Mines (Limited).—An extraordinary general meeting of this company was held at Winchester House on Thursday, Sir Charles Cameron, M.P., the Chairman presiding. The Chairman explained that the object of the meeting was to pass a resolution altering clause 54 of the Articles of Association, so as to permit the holders of the recent issue of debentures to convert them into shares on application. Mr. Scear seconded the motion, which was carried.

NEW ST. AUGUSTINE, LIMITED.

Prospects improving.—The output to be increased.

An extraordinary general meeting of the New St. Augustine (Limited) was held on Thursday at the Cannon Street Hotel, E.C., Mr. R. BYRON JOHNSON presiding.

The SECRETARY (Mr. G. H. Newman) read the notice convening the meeting.

The CHAIRMAN said it was a great pleasure to him to meet the shareholders now that they had arrived at the present gratifying stage in the company's position and prospects. He assumed that the short report which accompanied the notice had been read, and with satisfaction, and he now proposed to place before the meeting a few more facts to enable them to complete their judgment upon the question to be decided, which was whether the remaining 6d. per share of the company's capital should be called up. He would remind them that in past years the company had had to contend against all sorts of calumnies, and had over and over again been described as a swindle, especially in the Kimberley Press. But their detractors were rapidly being extinguished, and no man in his senses would now dispute that they had a diamond mine. That alone was a great moral satisfaction to those who had, through all the calumnies that had been hurled at the company, stuck to their original holdings, and pinned their faith on the integrity and capacity of their first managing director, Mr. J. B. Finlason. His present object, however, was to show the material rather than the moral advantages which they had gained. When the mine was reconstructed a year ago, everyone was under the impression, engendered by the experience in other diamond mines, that the ground at the surface and for a considerable depth below would not pay for working, and that the proper course to pursue was to make further trials to test the mine at the deep levels which were paying so well in the Kimberley Mine. That, therefore, was the policy undertaken by the board in pursuance of the unanimous decision of the shareholders in general meeting. It was their last shot, so to speak, and they hoped by means of 1s. 6d. per share on 500,000 shares to raise a capital of £37,500 to devote to that exploration. As a matter of fact, only 300,000 shares had been taken up, so that with the calls of 1s. a share at present made, the amount realised had been about £15,000, from which a deduction of over £3000 had to be made for the expenses of the company's formation, &c. The work of unwatering the mine was energetically pushed on, but great and unexpected difficulties were met with, owing to the damage caused to the shaft and pumping gear and machinery by the carelessness exercised by the officials of the late company on the removal of the pumps. This had now happily been put right, and the shaft and machinery were in perfect order. While those works were in progress their mining captain, Mr. Bruce Brand, strongly advised them to have the top yellow ground prospected, to which the board assented, and the happy results of those prospecting operations were evidenced by the greatly-enhanced value of the shares in the market. A letter from Mr. Benjamin, dated Kimberley, 18th February, said:—

> Yellow ground. The ground we are now taking out from the lower paddock is looking grand, but I leave this matter for Mr. Brand to report upon. Mr. ——— was out here on the 11th inst., and was more than pleased with what he saw. As a result of his visit, it is openly reported that he cabled home for the purchase of shares to the amount of £35,000. A Mr. Read, an old digger, has also visited the mine during the past week, and expressed great astonishment at what he saw. It is considered by those competent to form an opinion that outside the mines so far proved we have better show than any other.—Diamonds. I have this day shipped 82¼ carats, valued at £177; this is the finest parcel yet sent. There is a 9¾ carat stone, valued at £8 per carat. The quality of the parcel is magnificent, averaging 42s. 6d. per carat.

A letter from Mr. Brand, dated the 25th ult., stated:—"To-day we had a trial wash of comparatively clean yellow, 280 loads, yielding 33¼ carats. About 100 loads of hard yellow lumps yet to be treated will probably increase the yield to 40 carats." Everything came to him who knew how to wait, and their patience had been rewarded. It was owing to a variety of local circumstances—the chief of which were the recent completion of the railway to Kimberley, and the immense consequent reduction in the price of fuel, and other commodities, and also the reduced price of labour—that they were now enabled to work at a handsome profit that yellow ground which, in the earlier days (although known and proved to be diamondiferous), was not considered capable of profitable working. When Mr. Brand had proved by working on a large scale that this paying yellow ground was no exceptional spot, but covered a large area, and improved in quality as it grew deeper, and that, therefore, they could work out their mine at a profit from the surface downwards—when this unexpected piece of good fortune for the company was made apparent, the board, having regard to the small available capital, took upon themselves to discontinue the underground workings and the heavy expense of pumping—(hear, hear)—and the whole of the company's funds and forces were now occupied in the surface workings only. A great deal of work had been done, and large area of ground uncovered of débris and top soil, and the existing machinery was capable of washing some 4000 loads per week so soon as some slight additions already ordered were made. In the report accompanying the notice of meeting the directors had only given the yellow ground credit for producing something over 10 carats per 100 loads, but Mr. Brand's letter received since stated that it averaged 12½ carats, and this, it must be remembered, was only at a slight depth from the surface. The cablegrams received weekly from the mine did not fully represent the diamonds that had been got out of the previous washings, because subsequent letters generally showed that a further amount of diamonds had been obtained from the same stuff. The board had, therefore, given instructions to have the cablegrams postponed for a week in order that the actual result of each washing might be communicated to the shareholders and to the public. Mr. Brand estimated that there were 5,000,000 loads of yellow ground, irrespective of the blue ground beneath. The directors were aware that plenty of good blue ground did exist, and, for all they knew, it might spread away at a certain depth far beyond the surface area of the mine. In particular reference to this, he reminded the shareholders of a statement made some three or four years ago, when they were at work in the 509 feet level, that their men could distinctly hear the men working in the Kimberley Mine. According to the mining laws of the colony, section 69 of the Act of 1893, "In the event of its being discovered at any depth from the surface of any mine that the soil containing precious stones or minerals shall expand or diverge in any direction, the registered claimholders in such mine shall be entitled to follow such soil in all its dips, angles, and variations." He was not aware that this section had been repealed, and, therefore, it appeared that they were entitled to follow their blue wherever it was found underneath the surface. (Applause.) Reverting to the yellow ground, the present average cost of working it from the surface was taken in other mines to be from 6 to 7 carats per 100 loads, and as their diamonds were of more than average value, they might assume that the cost would not be more in their case. This would leave them a profit of 6 or 7 carats per 100 loads, but they would take it at only 5 carats, which at 27s. 6d. per carat came to £6 17s. 6d. per 100 loads. What they desired to do at the present time was to extend their output to 10,000 loads per week, which would give them a gross profit of £687 10s. per week, or £35,750 per annum; or, after deducting all fixed charges, a net profit of, say, £30,000 per annum. Taking the present value of the shares at 8s., this profit would represent a dividend of 25 per cent. per annum, which he heartily hoped they might soon be earning. (Applause.) To effect this, however, they must increase their plant and machinery, and though they had not yet been able to obtain exact estimates of the cost of extending the output to 10,000 loads per week, they had little doubt that £5000 would more than cover the expense. The call of 6d. per share would provide £7500. Even with the large quantity of extraneous matter dealt with in opening up the surface workings they had paid their own way, so that the call should be ample to satisfy all the company's purposes, and produce the result he had indicated. (Applause.) The Chairman concluded by moving the following resolution:—

> That the company hereby determine to call up the remaining 6d. per share of the company's issued capital (referred to in clause 8 of the agreement dated April 2, 1894, made between the St. Augustine Mine (Limited) and its liquidator, of the one part, and this company of the other part, as only to be paid in the event of the company in general meeting by extraordinary resolution determining to call up the same). The call of 6d. per share to be paid by the members of the company at such time or times as the directors shall deem expedient.

Mr. H. S. SAMUEL seconded the resolution.

In answer to questions,

The CHAIRMAN said it was proposed to call up 3d. at once, and the remainder when required. (Hear, hear.) Roughly speaking there was £2000 in hand.

The motion was then put and carried unanimously, and the meeting ended with a vote of thanks to the Chairman.

THE ROBURITE EXPLOSIVES COMPANY, LIMITED.

Business extending.—A satisfactory state of finances.

The ordinary general meeting of the shareholders in the Roburite Explosives Company (Limited), was held on Thursday, at the Cannon-street Hotel, the chair being occupied by Lieutenant-General Sir JOHN STOKES.

The SECRETARY (Mr. H. A. Krohn) read the notice convening the meeting.

The CHAIRMAN, in moving the adoption of the report and accounts, said that the business of the company had increased during the past year, notwithstanding the general depression in trade which had affected them both at home and abroad. When trade revived, however, they would be in a position to fully profit by it. The shareholders would be glad to know one thing—that the Government of India had at last consented to permit the manufacture of roburite within the empire. Turning to the accounts, the gross profit for 1894 was £17,267, or an increase of 70 per cent. on the gross profits for the year 1890, when the capital was rearranged. The net profits for the year, including the amount brought forward, were £7300. An interim dividend at the rate of 6 per cent. per annum had been paid on the preference shares in September last, and a further dividend at the same rate was now recommended, making up the full balance for the year. There would then be left a sum of £2,646, out of which it was proposed to declare a dividend of 1 per cent., carrying forward £926. In regard to depreciation the Articles of Association provided that nothing should be written off under this heading for five years, except by the special authorisation of the shareholders. The machinery, plant, &c., had been kept in thorough repair, and large additions had been made to it, so that in the opinion of the Directors the plant, &c., was rather better in value than it was four years ago. The directors had determined to adopt the same course as last year, and to accept only the small fixed sum that had been agreed upon, viz., £750. They had never drawn the maximum of their fees, and last year they had waived their additional remuneration owing to the depression occasioned by the coal strike. This was in despite of the fact that their duties and labours to make the business as successful as ever had been exceptionally severe. He wished, in conclusion, to call the attention of the shareholders to the great expense and inconvenience occasioned in the cartage of roburite by the stringent regulations of the Government. The colonial authorities had been ready to allow roburite to pass on their railways without any hampering regulations, but they were induced to draw back because of the vexatious conditions imposed by the home authorities on all explosives, safe or unsafe.

Vice-Admiral COLOMB seconded the motion for the adoption of the report and accounts, deprecating severely the attitude of the Government in hindering the removal of the safer explosives and in not hindering to a greater extent the progress of the unsafe explosives.

General SIM spoke of the difficulties raised by the New Zealand Government as to the carriage of roburite, and said that there was a strong feeling in favour of the explosive in the colony.

The motion for the adoption of the report and accounts was then put and carried unanimously.

Colonel GERARD SMITH was strongly of opinion that no dividend should be paid on the ordinary shares, while there was such a large balance due at the bankers.

Resolutions were then carried authorising the payment of 5 per cent. on the preference shares, and of 1 per cent. on the ordinary shares.

The retiring directors, Colonel Wray, Mr. Charles Cockson, and Sir John Stokes having been re-elected, the proceedings terminated with a vote of thanks to the Chairman.

SOUTH AUSTRALIAN LETTER.

(FROM OUR OWN CORRESPONDENT.)

ADELAIDE, FEBRUARY 12.

THERE is not very much of importance to chronicle in reference to gold mining beyond what has already appeared. The Lux Mine (old Mingary) is opening up very satisfactorily, and will, no doubt, soon prove a paying concern, as also will the Queen Bee adjoining. The 4 cwts. of quartz from the Lux, which was rich in gold, has at last been crushed, and the gold extracted. The fine gold weighed 67½ ounces. I had previously estimated the value of the specimens at 300 ounces of gold per ton, but the actual result was 12 per cent. more. The Kerkeek's Treasure, at Nillinghoo, is turning out stone worth 2 ounces to 3 ounces per ton, and the Wadnaminga Mines 1½ ounce stone. Some of the old Woodside mines—as the Eureka and the New Era—are being worked again, and yielding very payable returns. Gold is occasionally found in new localities. To-day an old resident of the neighbourhood informed me that alluvial gold was being got in the South Para river, about 25 miles north of Adelaide.

I regret to say that the alleged discovery on Kangaroo Island has not yet proved to be anything of importance; but quite recently another is reported on better authority at the eastern end of the Island, in Backstairs Passage, in a hill going down to the water's edge, showing surface reefs and veins carrying fine gold. I intend going to inspect this for myself shortly, and will send you the result of my observations.

The Blumberg and Mount Pleasant Mines are rather languishing for want of funds. There is plenty of good auriferous land here that with a very moderate expenditure of capital could be made to pay dividends within six months.

While you in England are being frozen to death, we in Adelaide are enjoying a genial warmth varying from 90° to 106° in the pleasant shade. The heat scientifically registered at the Observatory to-day was 105·4° in the shade, and 165° in the sun's rays.

CAPE GOLD EXPORT.—The Castle Line steamer *Roslin Castle* left Cape Town with gold to the value of £60,000.

LEAD PRODUCTION IN THE NORTH OF ENGLAND.—There was a further decrease in the production of lead ore in the North of England last year. The Durham district had a fall of 150 tons, but Newcastle district reports a decrease of over 1200 tons.

THE INSTITUTION OF MINING AND METALLURGY.

The Annual General Meeting.—The New President.

THE fourth annual general meeting of the members of the Institute of Mining and Metallurgy was held on Wednesday in the Lecture Theatre of the Geological Museum, Jermyn-street.

Professor HUNTINGDON, the retiring President, occupied the chair during the first part of the proceedings.

The minutes having been read, the report of the Council, and the statement of accounts for the year ended February 28th last, were submitted. From the former it appeared that at present the Institution has a membership of 167; while there are 80 associates, and 48 students. The main result of the accounts is a credit balance of over £600.

On the motion of Mr. MOREING, seconded by Mr. CLAUDET, the sum of 100 guineas was voted to the late Hon. Secretary of the Institution, in recognition of past services.

Mr. H. COLLINS then took the chair, and delivered his Presidential address, some passages of which, from a sense of their value and a desire to preserve intact the language and style of the speaker—we quote as they were given. Having briefly sketched in the broad lines upon which, in his judgment, the work of the Institution should proceed, the speaker continued:—Passing from our own particular affairs to others which more directly concern the outside public, we cannot fail to notice that the speculative investor is recovering a little from his most recent and violent attack of gold fever. The 100 West Australian mining companies formed up to the end of 1894 have nominal capitals aggregating eight and a half millions sterling. How much or how little of this has been actually subscribed we shall never know—probably not more than one and a half million, if so much. And it is pretty certain that the really available working capital will be less than one million. Members of this Institution have, so far, had very little to do with their inception, the reports quoted in the prospectuses being mostly signed by hitherto unknown men, few of whom are mining engineers in any proper sense, and many not even mining engineers in any sense. Yet there are many reasons why we should wish for the success of these or any other gold mines, although our wishes are probably far ahead of our expectations. Considering the inconvenient situation of the mines, the scarcity of water, the nature of the climate, and, above all, the smallness of the working capitals, it will be surprising if so many as ten out of the hundred companies ever make a farthing of return to their shareholders, though the reconstructors, who will make their appearance after the inevitable liquidations, will probably do much better. And of one thing we may be sure—whether the mines pay or not—a new outlet for emigration has been opened, and new customers for the Mother Country will follow in due course.

One cannot but remark that to the ordinary speculator the word gold acts like a charm. It is true that gold has an advantage over all other metals, in that it is not only a commodity but a standard of value; valued, too, in terms of gold by all the principal commercial nations, and purchased by the mints at a fixed rate. Hence it is that there are no such fluctuations of stated price as is the case with all other metals; and from this it follows that superficial observers lose sight of its enormous variations in purchasing power. Moreover, owing to modern and even recent legislation in its favour, and to the detriment of its former partner—silver—its purchasing power for nearly everything, except manual labour in gold-standard countries, has been continuously, though irregularly, appreciating for many years past, and this has continued, in spite of the greatly increased gold production of several recent years. The production of gold in 1894 was greater than in any previous year, greater even than in the then alarming "record" year of 1853, by about seven millions sterling.

Fluctuations in price nullify the calculations of the most careful and discreet miner, particularly as wages rarely follow those movements which are downwards in due proportion, and often do not follow them at all. It is fortunate for the gold miner that the gold standard money value of an ounce of gold is subject only to very small fluctuations; and still more fortunate than in recent years its purchasing power has so greatly increased, as I have already pointed out. To take another and, perhaps, more striking illustration—10 ounces of standard gold, which would in 1853-4 have purchased 156 ounces of silver, 6½ cwts. of copper, 7 cwts. of tin, 34 cwts. of lead, or 31 cwts. of spelter will now purchase 340 ounces of silver, a ton of copper, 13½ cwts. of tin, 80 cwts. of lead, or 42 cwts. of spelter.

It is often said, that the general cheapening of metals and other commodities during the past quarter of a century is due to the improvements which have been effected in production, treatment, and transit, and this no doubt is true to a very considerable extent. But why has not gold been similarly cheapened? The working improvements effected have been at least as great, and in some respects greater, than has been the case with any other metal. The maintenance of its value has no doubt resulted in part from the, until lately, greatly lessened supplies, as I have said; but this cause has certainly been aided by the positive legislation in its favour, and to the detriment of silver, which was effected in Germany, France, and the United States in 1873, and by the closing of the India Mints in 1893. Meanwhile, as wages measured in gold have not materially fallen off in gold-standard countries; while, similarly measured, they have been reduced by one-half in silver-standard countries, such as Mexico, South America, and the East Indies, it follows that the competition of these countries is being felt by us at home most seriously. They are able to pour in large supplies of silver, tin, and other commodities at present prices without feeling the depression, since the dollar value of these commodities is as great as ever; and this practically amounts to large premiums on production in those countries. I might go on to speak of various remedies which have been suggested to neutralise the ill effects of the great appreciation of gold in recent times, but this I fear would make my address augmentative rather than suggestive, as I wish it to be. Meanwhile, we may all—whether monometallists or bimetallists—join in the hope that the production of gold will go on increasing as it has done for the past two or three years.

The mining industry, in spite of its inevitable disappointments—in spite, too, of the great fluctuations in price which affect all metals except gold, and which in the long run tell generally against the producer and in favour of the market speculator—is obviously very profitable, and my belief is that if we could eliminate the factor of watered capital in its various forms, it would show itself to be, perhaps, the most profitable of all. But I doubt if mines of gold, taken as a class, have been hitherto so profitable as those of other metals. At the present moment about 65 millions sterling are said to be invested in mining in golden South Africa, which produce in dividends about 3½ millions per annum, or (say) a little under 5 per cent. Considering the amount of "watered capital" which that 65 millions represents, I do not think this can be considered a bad return from any point of view. But if this be compared with the product for many years past of the Spanish pyrites mines, with their 3 per cent. of copper contents, or of the Spanish lead mines, or of the great silver mines of Mexico and South America, or even of the Cornish tin mines (though they are now under a heavy cloud) the comparison will certainly not be in favour of the gold mines. It used to be said, "it takes a silver mine to keep a gold mine running," and when fair play is given to both metals, both or neither being privileged by legislation, I think that will still be true to a considerable extent. But the magic of the world "gold" is great, and I do not think it is too much to say that people in general are better satisfied to spend 25s. in getting 20s. worth of gold than they are to spend that same 25s. in getting 30s. worth of silver, copper, or tin. And as a speculative counter, apart from the particular merits or demerits of any particular

mine, the word gold is almost as good to conjure with as the word diamonds.

The greatest modern improvements in connection with metal mining which have tended to lower prices have no doubt been made in methods of ore treatment. It is true that many of us are old enough to remember the introduction of wire-ropes, rock-drills, and high explosives; but these have not so much cheapened as quickened the results aimed at. But in the treatment of the ores at or near the mines, after they have been brought to the surface, and before they are turned into money, so great have been the improvements that products and residues formerly regarded as too poor or too refractory to be worked without loss, have now in some cases become the chief sources of revenue to the mines concerned, in spite of a lowering of prices, amounting on an average to more than one-half. Ore treatment, as above defined and limited, may be conveniently considered under the three heads of mechanical concentration, wet chemical treatment, and smelting; and in each of these hand-picking is extremely advantageous as a preliminary in cases where it can be adopted.

The modern machines used in mechanical concentration, when properly selected and applied, leave little to be desired. They include rock breakers, rolls, stamps, grinders, &c., for "reducing" the ores; grizzles, trommels, and separators for "sizing;" buddles, strĕks, and similar appliances in which the ore particles rest on each other in the process of concention; percussion-tables, vanners, slime tables, and dead frames, in which the ore particles are stranded, so to speak, on surfaces of wood, metal, cement, or india-rubber—all these have received great attention of late years, and many of them, when applied under the conditions to which they are best suited, are not far from perfect in their action. But mechanical concentration is rarely advantageous when gold quartz, or true silver ores, as distinguished from complex silver-bearing ores, are in question; and even in the few cases where it can be used at all with ores of the precious metals, it is only as a preliminary to some other process, and generally to some form of smelting. Mechanical concentration is also generally inapplicable to the ores of mercury, and to the oxidised ores of all the common metals except tin. Some of the wet chemical methods have also been brought to great perfection, while a large amount of attention is still being devoted to their improvement, as we have had particular means of knowing lately. Under this head, in which, of course, the wet treatment has often to be preceded or accompanied by mechanical reduction, I include every form of gold amalgamation and chlorination, as also the cyanide treatment of gold ores and tailings; also the patio and other silver amalgamation processes, the silver lixiviation processes, and the numerous wet methods of copper ore treatment. Direct amalgamation, chlorination and cyanide treatment are often very advantageous for "free-milling" ores—*i.e.*, where the gold is free, and the silver is either free (and not in too large particles), or in an oxidised or haloid condition. This direct treatment is often suitable, also, when the precious metals are associated with easily decomposable sulphides; but where the sulphides are of a refractory character it must generally be preceded by roasting, and this is the case, too, with most of the wet methods of copper extraction. With many pyritous ores, whether of the precious or common metals, it would, no doubt, be advantageous to adopt a coarse jigging concentration, so as to produce a rich smelting product, treating only the jig refuse by the ordinary fine concentration methods.

There is still room for great advancement in connection with slime treatment. The slimes resulting from mechanical reduction are, at present, largely wasted, and the loss from this cause is so great as to lead to frantic cries against slime production But in many cases the valuable particles in the ores are so minute that they cannot possibly be liberated without the production of a large proportion of slime, so that it must be regarded as a necessary evil. It seems likely that the greatest difficulties in the treatment of gold slimes are now in course of being overcome by Mr. Sulman and others, while tin slimes can be dealt with very effectually when they contain no more than one-tenth of 1 per cent., given favourable conditions of labour and such climate as we have in Cornwall. It cannot always be said that modern methods of mechanical or chemical ore treatment have proved themselves more effective than the ancient ones; but they are usually more rapid and require less manual labour, and so are better suited to the conditions under which capital is usually obtainable in our times. The methods of ore treatment falling under the third head are applicable to a far greater number of metals, and to a far greater variety of ores than either of those already referred to. When the precious metals occur disseminated through complex masses of sulphides, such as galena, blende, and pyrites, and especially when silver exists in combination with arsenic or antimony, as in the case of ruby-silver, polybasite, fahlerz, &c., it frequently happens that a better percentage of extraction is secured by crushing and mechanical concentration, followed by roasting and smelting, than in any other way. Furthermore, seeing that in general even the wet processes adapted for the extraction of the baser metals are preceded by a roasting and followed by a smelting process, it seems reasonable to suppose that in many cases a direct raw smelting of the original ore would be preferable.

This one general question must from time to time come before every mining or metallurgical engineer who finds himself in charge of works. "In what state shall I sell our product, and after what kind and degree of preparation?' It is a complex problem, for there are many factors to be considered, and they are all variable. Yet his success or failure will usually depend upon the answer he is able to give. I propose to specify a few of these factors, and to offer a few remarks upon each of them.—1. The proportion of ore material actually broken or handled to that produced by hand-picking, or finally subjected to concentration, amalgamation, or other treatment. In the case of alluvials, the whole material is often so treated; and in bed-mining and quarrying the proportion treated is frequently as much as much as 90 per cent., and not infrequently more; while in vein mining it varies from 75 per cent. down to 25 per cent., or even less.—2. The proportion of ore treated ("crude ore") to "marketable product." This proportion varies within still wider limits, for, while in iron mining and some pyrites mining the crude ore is the marketable product, and in vein mining the marketable product varies from 80 to 90 per cent. down to 1 per cent or less of the crude ore, in tin alluvials the marketable product is often not more than 1-10th of 1 per cent., or 1 part in 1000th, and in gold alluvials sometimes not more than 1 part in 30 millions.

3. The proportion of metal finally utilised from the ore material originally handled can only be very roughly estimated, though it is far less than is usually supposed; but the following will again serve as first standards of comparison:—Gold: Over 90 per cent. is often saved in the case of vein quartz containing coarse free gold, and a still larger proportion whenever the ores are smelted direct. Less than 60 per cent., however, can be saved by simple amalgamation milling, when the gold is extremely fine and the veinstone contains large quantities of clay, iron oxide, barytes, or oxide of manganese; and I have known as little as 20 per cent. to be so saved; though by different treatment, and at a somewhat greater expense, the same ores can be made to yield 80 per cent. of their assay value. On the whole, I have grave doubts whether so much as 70 per cent. of the gold contained in all ores treated up to the present has been saved.—Silver: Here, more than in the case of gold, it is found that direct smelting is necessary in order to save 90 per cent. and upwards of the silver contents, while the milling processes which obtain over 80 per cent. are comparatively few, many only giving 50 per cent., or even less. Allowing for the much larger quantities of hand-picked and concentration mill refuse still containing notable quantities of silver, I doubt whether the average proportion finally utilised is greater than in the case of gold ores—viz., 70 per cent., although smelting is so much more common.—Quicksilver: Here the proportion saved can only be as high as 90 per cent. when the ores are fairly rich, the hand-picking very good, and the condensing arrangements perfect, or nearly so. With low grade ores, where the absolutely necessary rejections in hand-picking are considerable, the proportion saved can be but little over 50 per cent.; an average saving of 75 per cent. is probably not far from the truth.—Copper: The conditions vary enormously—from a maximum of over 95 per cent. to a minimum of less than 30—the highest results from smelting comparatively high grade ores direct and the lowest from extensive hand-picking of low-grade oxidised ores, so as to obtain a product rich enough for direct smelting. Average about 80 per cent., or perhaps a little less.—Tin: With very low-grade ores, where the particles are fine, the proportion utilised may not exceed 50 per cent., while with rich ores in coarse particles it may be as high as 90 per cent. Average, perhaps 80 per cent.—Lead: Rich ores by direct smelting probably yield 85 per cent.; of low-grade ore bodies, perhaps the final yield is not more than 50 per cent. The general average, perhaps 75.—Zinc: Direct smelting after mechanical concentration is almost universally employed. Extremes of utilisation probably 70 and 30; average, 60 to 65. As a general average, a utilisation of 75 per cent. of the metals contained in the ore bodies may be taken with little probability of serious error.

4. Cost of various modes of treatment. Here, again, the variations are naturally very great in different districts and under different conditions; but it might be well for us if we could recognise certain figures as reasonable standards of comparison for ordinary cases.

5. Local demands for special products and bye-products. Such demands may often determine the mode of treatment of an ore. Thus, where there is a local demand for sulphate of copper, or where dilute acids are cheap, a wet process of extraction may be more advantageous than a dry one, or than mechanical concentration; and in such cases it may even be preferable to turn a finished product like copper bars into the less simple form of sulphate. Whether sulphuric acid shall be made or not; whether attempts shall be made to condense arsenic, sulphur, lead, or zinc-fume; whether sulphate of iron shall run to waste—the answer to these and a hundred similar problems must depend upon local conditions more than anything else. Basic ores and concentrates may sometimes be sold for prices far in excess of the value of their metallic contents, and in such cases it will often be best to sell in a somewhat crude state rather than to concentrate and refine to a high pitch.

6. The kind of labour available must be considered by the mining engineer. In old mining countries skilled labour is usually abundant, while the reverse is generally the case in new countries. Anyone who has had to sink a shaft in heavy ground, or to "spill" through running ground, with "green hands," will understand the importance of skilled labour in mining, will duly value the services of such born miners as the Cornishman and the Mexican, and will sympathise with the man who finally decides upon driving a long tunnel or even opening up a great quarry so as to avoid the initial difficulty, even though it may entail greater difficulties upon those who come after—probably at a time when the new camp has become an old one, and skilled labour is no longer rare. Similar considerations will often lead the thoughtful and well-instructed engineer to prefer a crude process of ore treatment to one which, though far more perfect and effectual in skilled hands, would be for him, and under existing circumstances, undesirable, if not altogether out of the question. It was the comparative rarity of skilled furnace men in the United States which led to the extended use of water jacketted furnaces; for these, though somewhat expensive in first cost, and rather wasteful in fuel, are easily handled by comparatively unskilled men, and very economical and easy to repair.

7. Considerations of climate.—As a general rule, it is no doubt recognised that processes requiring much water are not suited for dry climates, unless there is some abundant natural supply available. On the other hand, some dry processes are at a great disadvantage when operated in very moist climates. One of the best illustrations of climatic influences is observable in connection with tin dressing. As there must be a series of operations, and the ores must be mechanically concentrated to a high degree of purity before smelting, this requires cheap and fairly skilled labour, and plenty of water, so that a moist and mild climate is a great advantage. It is not generally known that a really dry state of the atmosphere renders the dressing of fine tin ore a most difficult operation, for, if once the particles get really dry, there is always a heavy loss of float tin. 8. Possible scale of operations: It is obvious that the administration expenses and other standing charges, and even some of the working expenses, will be much lessened in proportion as the scale of operations is enlarged. But small scale operations are often the only ones possible, and if the manager is an all-round man, the disadvantage may not be so very great after all. 9. Pilfering and robbery: Pilfering is naturally more common in the case of rich than of poor ores and products, and in some cases it exists to such an extent as to seriously affect the financial results of an enterprise. Thus it is that an extensive mine of low-grade ores has often an advantage over one of less extent, where the natural concentrations have been more complete. Ores are generally more easily pilfered than ingots; in fact, these latter, when of considerable size, are extremely difficult to steal, and often difficult to realise when stolen. White men generally say "niggers" are great thieves; but I doubt whether there is any great difference other than in method. Personal search is rarely submitted to by Europeans or Americans, and even with the dark races it is not very effectual where rich substances are concerned.

10. Transit facilities.—In general terms it may be said that the transit cost (and insurance) of the precious metals is insignificant as compared with their value; that of ingots of base bullion is more noticeable, but still of little importance; that of ordinary ingots of metal or sacks of matte more considerable; that of ores so considerable as often to be prohibitive. As regards supplies, such as timber, fuel, and iron; these are often prime necessities, and required in large quantities; while considerable weights of salt, bricks, and other commodities are also frequently required. Obviously the advantage of good roads, railways, shipping ports and other modern transit facilities will be in direct proportion to such requirements of supplies from external sources, other things being equal; while, for want of such facilities, many essentially good mineral deposits are, and must, for the present, remain unworked.

11. Financial considerations.—The amount of working capital actually available is the real crux of most mining adventures in their initial stages. Both mine and mill are often crippled for want of money, and the manager has to do as he can, and not as he would, so that makeshifts, costly in the end, are frequently unavoidable. But even where money is not actually unobtainable it may happen that a high rate of interest will lead to a modification in the character of the plant at first proposed. In countries where 12 per cent. or more is the normal rate of interest, it will often pay better to employ more unskilled labour; on the other hand, if money can be borrowed at 3 or 4 per cent., more and better machinery can be provided with advantage. Fluctuations of price affect seriously all mines, except those of gold. Reference has already been made to the great fluctuations of price to which tin, copper, lead, and spelter have been subject during the past 40 years, fluctuations from which gold, and until very lately, silver, have been protected by legislative enactments. Ups and-downs, if not too great, may, however, be borne if an enterprise is not too much straightened for want of capital; but a practically continuous decline of 50 per cent. within a quarter of a century—not to speak of a fall of one-half in a single year—must necessarily upset all calculations. The influence of the share market is also detrimental in many cases if a mine is a market favourite—*i.e.*, one in which dealings in the shares are frequent. If the directors are market operators, as too frequently is the case, the unfortunate manager may be ordered to rush the output, or he may be obliged, from want of funds as well as from want of time, to neglect all proper development works and explorations in advance necessary to secure a permanent success.

Most of the conditions or "factors" thus adverted to, together with many others of a less important character, but still worthy the attention of the advising engineer and the mine manager, were enumerated by our colleague (Mr. Charleton) two years ago. Of course, the finally deciding ultimate or "resultant" factors are, or should be (*a*) gross cost of the processes, and (*b*) net value of the products these being modified by a consideration of the degree of permanence of the existing conditions. Fortunately, nearly all the variables mentioned above can be reduced for comparison to terms of cost. And furthermore, I have already mentioned certain general conclusions as to which we are all agreed—to which we may add a few others, such as that low grade free-milling gold and silver ores should be reduced to bullion before leaving the mill; that copper and lead ores, and especially those which are already oxidised, should be smelted at the mine if fuel and fluxes are obtainable at moderate rates; and that whether for milling or smelting this reducing operation should be carried out as near the mine as possible. On the other hand, no one doubts that it is on the whole, and under existing conditions, more advantageous for the great Spanish companies to ship their pyritic ores, copper precipitates, and mattes to England, rather than to convert the sulphur into sulphuric acid on the spot, or to make refined copper with imported coal. Similarly, it is best for all parties "base bullion" should be sent for refining from Mexico to England or the United States. The President concluded by a few sentences of self-criticism and explanation:—My remarks have necessarily been somewhat discursive, but not, I hope, rambling or dogmatic. Suggestion or review may be suitable, even criticisms may sometimes be allowable in a Presidential address; dogmatism is certainly out of place, and I hope I have managed to avoid that. In urging that the education of an engineer is never complete, I have always had in mind my own deficiencies, some of which have been already, and many others I doubt not will be supplied by my association with you in our common work. The motto in my own county is "One and All," and in one form and another its spirit exists wherever society exists. Let us then go on in the spirit of this motto, and we shall do great things for our profession, our clients, and our country.

Mr. MORRING proposed a hearty vote of thanks to the President for his address, and spoke in high terms of the suggestive character of the matter it contained.

Mr. KITTO, in seconding the resolution, referred to the distinguished connection of Mr. Collins with several of the learned societies of Cornwall, and to the high character of authorship reflected in many of his contributions to different transactions.

The vote was carried by acclamation and briefly acknowledged.

A vote of thanks to the retiring president—briefly proposed and cordially given—concluded the proceedings.

MINING IN CORNWALL

AND DEVON:

NOTES ON MINING IN THE WEST.

(BY OUR SPECIAL CORRESPONDENT).

DOLCOATH meeting has been held, but the world is not much wiser with regard to the scheme for raising additional capital than it was before. It is now known authoritatively that there is such a scheme, though the committee decline to give any details at present. There is, unfortunately, a hitch, and this in the direction where it was most to be feared. Mr. Basset and his advisers do not, it is understood, object to the scheme, but in regard to the terms of the new lease the negotiations between the Tehidy agents and the representatives of the mine have been anything but satisfactory. The terms offered are such that the committee are most emphatic in advising the shareholders to have nothing to do with them. It is, perhaps, unwise to indulge in very harsh language at the present moment, but Mr. Basset may be assured that a very strong feeling has been aroused, and if the shareholders in Dolcoath are not now met with fair and proper terms, the consequences are likely to be much more serious than the lord's agents themselves anticipate. The tone adopted at the meeting was a very firm one, and the large shareholders seem to be uncompromising in their determination to let the whole thing stand or fall by the decision of Tehidy. It is not too much to say that the decision will affect not only Dolcoath, but nearly the whole of the mines on the estate. It is entirely a question of dues, and the rate asked for by the committee is by no means unreasonably low, in view of the altered circumstances brought about by the great depth of the mine, and the increasing difficulties of working. One would have thought that Mr. Basset would have been the first to recognise the advantages likely to accrue from a large expenditure on his property, and have been prepared to accept suggestions from such a body of business men as the Dolcoath executive.

THE condition of things at the mine shown by the statement of accounts is very serious. After a continuous period of dividend-paying, extending over a quarter of a century, the premier mine of the county has made the very heavy loss of £5100 in three months—over £400 per week. Fortunately, this is not the result of any falling-off in the wealth of the mineral deposits, but is the outcome of the serious mishaps which have occurred during the last few months. It seems to be recognised that the only hope for Dolcoath is in the sinking of the new perpendicular shaft south, which we suggested before the crisis which now has to be faced became acute, and it may be taken for granted that this will now be done—at whatever cost. Captain Arthur Thomas hit the nail on the head when he candidly told the adventurers that if Cornish mines were to be made to pay, they would have to bring their appliances and mode of working more on a level with those of foreign mines. This can only be done at heavy cost, and the money can only be raised outside the county through the medium of the Limited Liability system. In short, as we have often insisted, if there is to be a future for Cornish mining it must be under conditions similar to those prevailing elsewhere, and it is satisfactory to see that most influential Cornishmen are at last coming round to this view.

THERE was another serious loss at Carn Brea, where on Tuesday the shareholders made a call of £6000 to meet a loss of £5200, while at Tincroft there was the less serious deficit of £500. At the latter mine they still have a balance in hand of over £1300, so that the mine has not yet reverted to the call-making condition. The only feature of Tincroft meeting was the somewhat heated passage-at-arms between Captain Teague and one or two of the shareholders. Captain Teague resented what he termed the "cross-examination" of one gentleman, and told the adventurers pretty plainly that if they did not appreciate his services as manager of the mine they had better get somebody else. The anxieties of the past quarter must have been very trying even to so capable a manager as Captain Teague.

MR. C. G. WARNFORD LOCK sailed yesterday (Friday) in the *Ormuz*, for New South Wales, to superintend the Wentworth Proprietary Mines.

DEPRESSION IN THE TIN-PLATE TRADE.—As a result of the depression in the tin-plate trade, the Pontymister Steel Works, which provide tin bars for the various tin-plate works of Mr. P. S. Phillips, in the Monmouthshire Valleys, have ceased operations. No fewer than 1200 men are thus thrown out of work.

LONDON AND SOUTH AFRICAN EXPLORATION COMPANY.—The directors of this company have declared a dividend of 3s. per share, less income-tax, for the quarter ending the 30th inst., payable on and after that date.

ON and after the 25th inst. the offices of the Explorers Syndicate (Limited), Lindsay's Extended (East) Gold Mines (Limited), Lindsay's Gold Mines (Limited), and the Thistle Reef Gold Mining Company (Limited) will be at Copthall House, Copthall-avenue, E.C.

The SUBSCRIPTION LIST will OPEN on MONDAY, 25th March, 1895, and CLOSE on WEDNESDAY, the 27th, for LONDON, and on FRIDAY, the 29th, for COUNTRY and the CONTINENT.

Royal Sovereign Gold Mining Company, Limited.

COOLGARDIE DISTRICT ("25 MILE"), WEST AUSTRALIA.

INCORPORATED UNDER THE COMPANIES ACTS, 1862 TO 1890.

CAPITAL £60,000, in 60,000 Shares of £1 Each,

Of which 20,000 will be allotted to the Vendors, as fully paid, in part payment for the Property, the balance of 40,000 being offered for Public Subscription. Payable 5s. per Share on application; 5s. per Share on allotment; and the remainder as and when required in instalments not exceeding 5s. per Share at intervals of not less than one month. Shareholders, however, have the privilege of paying up in full on allotment.

£20,000 WILL BE RESERVED FOR WORKING CAPITAL.

Priority of Allotment will be given to Shareholders in the Lewis Mining Investment Trust (Limited).

Arrangements have been made to receive applications in Paris through Messrs. HENRY and Co., 5, Rue Laffitte, and it is the intention of the Directors to issue Bearer Warrants for the convenience of Continental Shareholders.

Directors.

GRAHAM KING, Chairman, 63, Aldermanbury, London, E.C. (Chairman of the Lady Loch Gold Mine, Limited, and a Director of the United Limmer and Vorvohle Rock Asphalte Company, Limited).
ERNEST MONTFORT (Chairman Champ d'Or (French) Gold Mining Company (Limited).
EUGENE DE BEAUFORT (Mayenne and Sarthe Colliery Company), Laval, France.
T. HARRISON DAVIS, 4, Princes Mansions, Westminster, London.
*JAMES BURNETT, 8, Old Jewry, London, E.C. (Managing Director Lewis Mining Investment Trust, Limited).

* Will join the Board after allotment.

Bankers.—Messrs. BROWN, JANSON, and CO., 3, Abchurch Lane, London, E.C.
The CREDIT LYONNAIS, Boulevard des Italiens, Paris.
BANK OF AUSTRALASIA, Perth and Coolgardie, Western Australia.

Brokers.—Messrs. MALCOLM COOKE and LEMON, 65 and 66, Old Broad Street, London, E.C.
Messrs. ERNEST SULLY and CO., 113, Bute Street, Cardiff.
DOUGLAS CAIRNEY, Gresham House, 45, West Nile Street, Glasgow.

Auditors.—Messrs. J. and A. W. SULLY, Chartered Accountants, 70, Queen Victoria Street, London, E.C.

Secretaries and Offices (*pro tem.*).
Mr. HENRY SELBY, 8, Old Jewry, London, E.C. | M. A. PERAGALLO, 5, Rue Laffitte, Paris.

PROSPECTUS.

This Company has been formed for the purpose of acquiring and working two Gold Mining Leases, granted by Government on the usual terms, Nos. 1481 and 1482, consisting of 12 acres each, as shown on the Plan accompanying the Prospectus, and known as THE ROYAL SOVEREIGN GOLD MINE, situated in the "25 *mile*" District of the Coolgardie Goldfields, 25 miles north of Coolgardie, on what is known as "the Lone Hand Line of Reef."

The property has been inspected and reported upon by:—N. W. Harper, Mining Manager of "Fraser's Gold Mining Co.," Southern Cross, W.A.; Wm. Oats, Mining Manager, "South Frasers' Gold Mining Co.," Southern Cross, W.A.; Richard Crossland, Mining Manager, "Lone Hand Gold Mining Co.," 25 Mile, W.A.; and Wm. Adams, jun., M.A.I.M.E., of Coolgardie, late Manager of the "Junction Mine," at Broken Hill, N.S.W. Full copies of their Reports, upon which the statements made in this Prospectus are based, will be found herewith.

From a careful analysis of the above-mentioned Reports, the following important and salient points appear, which tend to show in a marked degree the value of the Royal Sovereign Mine:—

Points from Mr. HARPER'S report:—

Two distinct parallel Reefs traversing the property the whole distance.

Near the N.W. boundary, a vertical shaft 54 feet has been sunk, at a depth of 30 feet a portion of the reef was passed through which showed fair Gold. I believe when the reef is driven across at the bottom of the Shaft, that fairly rich Stone will be found. This work has been done on the Main Reef, which runs through the Country for an indefinite distance, and many valuable properties are situated on this line of Reef, and on either end of the Royal Sovereign. Following the trend of the reef south, a costeen (or trench) has been cut, exposing a reef 18 feet in width, which is well defined and showing Gold. An accurate estimate of quality cannot be formed; but, from appearances, should average 15 dwts. per ton. This average may be considered remunerative, as Fraser's Gold Mine is paying at the rate of £400 per month in dividends on an average of 9 dwts. per ton—and probably under greater disadvantages than ever the Royal Sovereign will be. To the east of this costeen (or trench), a few feet on the parallel Reef, a considerable amount of prospecting has been done, showing Gold in almost every Stone, estimated average 5 ounces to the ton; further South on this Reef, deep trenches sunk have produced rich Stone.

Near the Southern boundary a Shaft has been sunk 40 feet, producing rich Stone showing Gold freely.

Stone taken from this reef, and examined by Mr. Harper, which did not show any gold when dollied, gave results equal to more than 2 ounces per ton.

An abundant supply of water for Battery should be met with at a comparative shallow depth.

There is ample timber for all mining purposes.

Mr. WM. OATS in his report, says:—

On lease 1481 a costeen (trench) has been opened across Reef 18 ft., and from 4 to 5 feet deep, showing Gold all through the Stone, nearly 2 ozs. to the ton. A Shaft has been sunk on this Reef to 50 ft., where good Gold was found, reef well formed, but not cross cut through. Twenty feet East of Big Reef, a Shaft 40 ft. has been sunk, Reef 2 ft. thick, showing Gold over 10 ozs. to the ton!

At several points along the line in both leases, there are numerous trial Shafts and costeens, proving the Reefs to extend through the whole length of your property.

Taking the whole development of the leases, you have undoubtedly a property which is certain of success, only requiring proper machinery for mining and returning the Gold.

You have a large body of Stone already available for operation.

WATER.—At several points along the line, water has been cut in such quantities as to prove that by sinking little doubt need be entertained of obtaining sufficient quantities for all Battery purposes.

Timber for all mining purposes is readily obtainable in the vicinity, and when the contemplated Railway to Coolgardie is completed, carriage of material will be comparatively cheap.

Mr. Rd. CROSSLAND states:—

There are four parallel reefs running through this property, one is from 5 ft. to 18 ft. wide, cropping out of the surface the whole length of leases. On the North end about 40 yds. from the boundary is No. 1 Shaft sunk to a depth of 40 feet. Reef at surface, about 4 ft. wide, carrying nice Gold; also cut into Reef at 34 feet, carrying coarse Gold; Reef at that depth, about 2 ft. wide. About 250 feet South of No. 1 Shaft, the Big Reef is broken into showing coarse gold, seen freely in Stone. Reef No. 2 is about 60 ft. East of Big Lode, carrying rich Gold, Reef averaging 12 to 15 ins. wide all along the leases. One Shaft sunk about 8 feet, carrying very rich Gold; in the Stone at Grass, Gold can be seen very freely. About 70 ft. from South boundary Shaft down about 50 ft., carrying rich Gold, Reef averaging about 15 ins. wide.

Mr. ADAMS, Junr., in his lengthy report, says:—

"The blocks (leases) are most favourably positioned near the centre, on the strike of the great auriferous belt, which constitutes the famous 25 mile Gold Field."

Generally, he confirms what has been said by the other experts. One point in his report is of great importance—viz., in speaking of the Big Reef, he estimates it will for 6 or 8 ft. average 1 oz. to the ton, and when opened up, will show sufficient Stone to keep a 20 Stamp Battery going.

It will be seen from the Reports that the Royal Sovereign Gold Mine has been well tested, and proved to be a property of great promise and value, and with the necessary working capital for machinery and development, should take a high position amongst the dividend-paying mines on this wonderfully rich Gold Field.

Mr. G. D. GORRIE, of Coolgardie, a practical miner of 40 years' experience, who is one of the previous owners of the mine, states in a Statutory declaration made by him for the directors, that a 10-stamp battery will crush 150 tons of ore from the mine per week at an average return of £3, or about 2 ounces per ton. Taking the average of the ore from all sources at the lower estimate of 1½ ounces to the ton, and allowing £2 per ton to cover cost of working and other expenses, being the allowance mentioned by Mr. Gorrie in his declaration, a profit of about £4 per ton would be available for dividends.

Allowing 10 weeks in the year for stoppages, &c., this would work out as follows:—

42 weeks at 150 tons per week = 6300 tons at £4 per ton £25,200

£25,200 per annum profit would mean **dividends of over 40 per cent.**, and it may fairly be assumed that with a 20-stamp Battery at work this could be doubled.

The Vendors, who have acquired the property from Mr. G. D. Gorrie, and are re-selling at a profit, bear all expenses up to allotment, except the legal expenses of and incidental to the registration of the company, and have fixed the consideration for the sale and the other obligations undertaken by them at £40,000, payable as to £14,000 in cash, £20,000 in fully paid shares of the company, and the balance in cash or fully paid shares, or partly in cash and partly in fully paid shares, at the option of the Directors.

The following Contracts have been entered into:—An Agreement dated the 3rd November, 1894, between David John Morse Porter, of the one part, and George Dingwall Gorrie, of the other part; an Agreement dated the 27th day of February, 1895, made between the said George Dingwall Gorrie, of the one part, and the Lewis Mining Investment Trust, Limited (the Vendors), of the other part; and an Agreement dated the 15th day of March, 1895, between the Lewis Mining Investment Trust, Limited, of the one part, and this Company of the other part.

The Vendors have also entered into Contracts in connection with the guaranteeing of a portion of the capital, and the providing of the expenses attending the formation of the Company, to which the Company is not a party. These may be considered contracts within Section 38 of Companies Act, 1867, and subscribers will be deemed to have had notice of such contracts, and to have waived all rights (if any) to particulars thereof, whether under that section or otherwise. The above-mentioned contracts, the original Reports and Plan, the statutory declaration of Mr. Gorrie, samples of the Ore, and prints of the Memorandum and Articles of Association, can be seen by intending Subscribers at the offices of the Company.

Application for Shares should be made on the form accompanying the Prospectus, accompanied by a remittance of £1 per Share. If no allotment be made, the application money will be returned in full. If less Shares be allotted than applied for, the surplus will be credited in reduction of the amount payable on allotment, and any balance returned.

Prospectuses and Forms of Application can be obtained at the offices of the Company, and from the Bankers and Brokers.

CORRESPONDENCE.

*** We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.*

"A FORTUNE IN A TEST-TUBE."

THE NEW GOLD EXTRACTING PROCESS.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—In the *Pall Mall Gazette*, of February 5, there appeared a long report of an interview a representative of the journal had with Mr. H. Livingstone Sulman, respecting an alleged new gold extracting process. The article, which was headed "A Fortune in a Test-tube," was duly blazoned on the posters of the paper, which could be observed at every street-corner; and, doubtless, as a large proportion of the public are solicitous of receiving some information about making a fortune, the issue had a ready and speedy sale.

On the following day there also appeared a modest missive from Mr. Sulman—one of the pioneers of this belauded process—who disclaimed the avalanche of honour that he supposed had fallen upon him; also, he appeared to deprecate the storm of criticism to which he expected to be subjected. The mountain in labour, however, brought forth but a mouse, as the *Pall Mall's* racy account of the gold extracting process elicited but a small amount of attention at the hands of experts, for reasons well known to the scientific world. In the same journal, on February 7, some details in the interview, and one or two statements, were negatived by Mr. T. Kirke Rose, and Mr. H. Livingstone Sulman replied on the 20th of the month. Now, anyone interested may express surprise at this flourish of trumpets at the particular time specified—namely, February 5th. I should here say that I have purposely delayed stating my views on the subject, in order to give ample time for further correspondence, but such has not been published. It must appear to any person concerned in the commercial success of a process for the speedy and cheap extraction of gold, either in scientific or City circles, that it is a strange coincidence that this article was published but a few days before the "Cassell Gold Extracting Company *versus* Pielsticker" appeal against Judge Romer's decision in the court below. Indeed, it has been considered by some, who have had the advantage of a glimpse behind the scenes, a misfortune and evil augury for the Sulman process (should it be of the same utility as alleged), to sound its praises at such a critical moment.

I take it for granted that the Editor of the *Pall Mall Gazette* and his representatives, acted in perfect good faith. I may mention that the reporter referred to Mr. Vautin, who was at the interview, as Mr. Sulman's collaborator and supporter; he evidently was not aware of the fact that a Mr. Vautin gave evidence against the MacArthur-Forrest Process in the court below. There may be two Mr. Vautins, but we live in an age when a dash of wholesome scepticism is an advantage, and it would be well to obtain an authoritative statement respecting the identity of the gentleman or gentlemen, as mine-owners, being cognisant of all the circumstances, would hesitate before adopting a process, however excellent in itself, which was inaugurated in this fashion. As to the companies in Australia and India, referred to in the interview, who have advanced large sums for the commercial development of the Sulman process, would it not quicken public interest in the matter were the names of the trading concerns published, as well as the specific amounts contributed? In the statements of Mr. Sulman to the *Pall Mall Gazette* reporter, such details are scrupulously omitted.

I beg to submit the foregoing remarks as the views of an impartial observer.

Now to leave the commercial side for the scientific, I fancy that some of the laboratory conclusions of the Sulman process will not hold water, nor satisfactorily extract gold—at all events outside the laboratory; and I must, therefore, trespass further on your space in giving my views on the subject. The drawbacks to the use of bromide of cyanogen as a solvent for gold in the mining industry, are as follows:—

1. The instability of the compound, especially in warm or moist climates.

2. The expenses of the recovery of the bromine, and of the necessary plant for the same.

3. The certainty that both the nascent bromine and nascent cyanogen, giving rise to nascent oxygen, will first attack other and more oxidable parts of the ore, rather than gold and silver, and thus become used up in large quantity, and, in fact, in proportion to the amount of oxidable matter present, which on a pyritic ore is very large.

Thus, suppose a concentrate to contain 90 per cent. of various metallic sulphides, by far the greater part of this, if not the whole, would be attacked by the nascent oxygen caused by the liberated bromine, and by the hydrobromic acid developed in the reaction. Further, cyanide might be expected to be converted into at least cyanate, if not even further oxidised, and, in any case, the influence of cyanide would be lost by its destruction.

The Sulman process is, therefore, in its naked fact, only the old and well-known bromine process, which is of no use out of a laboratory, but has the aggravation superadded of being wedded to about a third of its weight of useless and costly cyanogen, masquerading as a cyanide process, which it really is not.

It would be better and more economical, though still highly prohibitive to use bromine at once; and to state this fact is to condemn the Sulman process. SCRUTATOR.

March 20.

THE REDEMPTION OF OUR BRITISH MINING ENTERPRISE.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—It appears to me that your Journal would be a valuable medium for working up a combined organisation of all political creeds for the purpose of effecting an out-and-out Parliamentary agitation upon the question of imposing protective or prohibitory duties upon the importation of such foreign minerals as compete so ruinously with our own—viz., in iron, lead, copper, spelter, tin, &c. I am personally located in the midst of a lead mining district, and it is a painful sight to witness the ruined and deserted mining works dotted about, and all in the face of the undoubted fact of the thousands of tons of splendid lead ore and blende lying beneath them. This, I expect, is more or less the case with the greater part of our lead-loded districts. When I refer to an organisation of all political creeds, I mean such an organisation for a forthcoming General Election which would induce the working class electorate (amounting as estimated to three-fourths of the total electorate of the United Kingdom) to put pressure upon every Parliamentary candidate, be he Radical, Liberal Unionist, or Conservative, and make him pledge himself to support any satisfactory measure before Parliament for protecting our native minerals from foreign competition. If I am wrong in this suggestion, your readers will probably correct me, and prove its unsoundness or its impracticability.

If, on the other hand, it is a desirable move, then you, Mr. Editor, would doubtless kindly prepare such information as may be needed for working up the campaign through the various Liberal and Conservative Associations, *e.g.*:—

1. The total quantity of iron, lead, zinc, copper, tin, &c., raised within the United Kingdom for the past 10 years.

2. The total quantity of such mineral ores imported during that time.

3. The market prices per ton of these minerals for each consecutive year.

4. The minimum prices per ton of the different minerals which would yield a reasonable profit to the mining company, and encourage them to reopen old works.

5. An approximate estimate (if any) of the probable yield of all mineral districts in the United Kingdom, either for iron, lead, copper, &c.

In conclusion, Mr. Editor, I should just wish to illustrate my argument as to protective duties by taking (say) lead as an example. Dealing with it, say, £7 per ton in the ore as its present imported price, then why not place upon it a duty of (say) £4 per ton. Out of this £4 duty let the Government take £1 for itself, and advance or distribute the accumulation of £3 per ton upon this foreign ore as a "bounty" (as long as it lasts) amongst all existing lead mining companies, according to the weight of ore raised and sold by each, the lead smelters or purchasers to participate in such "bounty," according to arrangement. Under some such protection and direct encouragement we should see our lead, iron, and copper mines all afloat again, very much to the delight of the great three-fourths electorate, who are now crying aloud for some such prospect, more especially when it does not prejudicially touch their pockets. For my own part, I intend doing my small share towards an agitation in this direction.—Yours faithfully, HOME MINERAL.

March 15.

P.S.—I am aware that it would be necessary to protect our manufactured minerals or metals from foreign competition in the same way, whether in pig, bars, or sheet, &c.; and its extension to imported iron machinery would be for further consideration.

THE QUEEN'S BIRTHDAY UNITED GOLD MINES, LIMITED.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—It may be of interest to some of your numerous readers to state the present position and prospects of that really first-class property, the Queen's Birthday United Gold Mines (Limited).

The company, floated on the London market some 2½ years ago, was an amalgamation of the Queen's, King's, Royal, and North Birthday, and Belgium and Perseverance—all local companies—and comprising practically the whole mining district of Goldsborough, near Dunolly, Victoria, and situate only some 30 or 40 miles from the world-famed districts for gold of Bendigo and Ballarat.

The Queen's Birthday, the pioneer company, has from a depth of only 500 feet raised and treated nearly £000,000 of gold, and returned about a quarter of a million sterling in dividends, about £150,000 having been so returned over a period of a little more than 18 months, the company's shares at this time

having reached the extraordinary price of £34 for the £2 paid shares on the exchanges of Melbourne and Ballarat.

The object of the present company is to recover the rich shute of ore ground from which the former dividends were paid, and this is confidently anticipated, as sufficient depth is attained, by all the best mining "experts" of the colony, including the Government District Surveyor, Mr. W. G. Couchman.

Mr. W. Barton, mine superintendent of the North Band and Barton Gold Mines, one of the most energetic and best-known miners in Victoria, has recently been appointed manager at the mines, and there is but one opinion that in his appointment alone the directors have done a great deal towards ensuring the ultimate success of the company. Mr. Barton was enabled to cable one month after his appointment: "Have struck gold upon Belgium and Perseverance reefs surface workings. Am very pleased with the aspect of the mines. Have started crushing." So that we shareholders may now look forward, month by month, for regular and increasing returns of gold.

The mines are fully equipped with splendid machinery and plant, estimated to have cost originally over £50,000, and are capable to-day, with their 87 heads of stampers, of treating 50,000 tons of quartz per annum.

The total area of the mines, including freeholds and leaseholds, is some 235 acres, with 13,305 feet of claims upon the lines of reefs, of which latter there are many not even yet prospected, which should render it desirable, at an early date, for subsidiary companies to be formed for this purpose, that the whole property may be energetically worked, and its great possibilities rendered available to the shareholders.

The preference shares (15s. paid) are now quoted 10s.–12s., whereas, if the company is energetically managed, the same should command as many pounds, and that, too, at no distant future. The whole mining district of Dunolly is practically under the control of this company, with a railway crossing a portion of the property, and water and fuel abundant in the neighbourhood for cheap and economical working on a large scale, it being estimated that all stone raised above 4 dwts. gold will return a "profit," the general average of the district being about ¾ of an ounce to the ton of quartz.—I am Sir, yours obediently,

A SHAREHOLDER.

London, March 18.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

AFRIKANDER.—The return of gold won for the month of was 191 ounces from 700 tons milled and 259 ounces from 1000 tons of tailings treated by cyanide, the total being 450 ounces.

ANGLO-MEXICAN.—The manager at San José de Gracia advises that the total output for February amounts to $89,000 from 1000 tons of ore crushed, based on a run of 22 days of 24 hours; 20 stamps.

BAYLEY'S REWARD.—The London office is informed by cable from the head office at Melbourne that the information asked for is being sent by first post, and that the recent yields are considered to about represent the average of dumps and stopes.

BAYLEY'S REWARD.—The following cablegram, dated the 21st inst., has been received by this company's London office from its head office at Melbourne:—"Week's run, 192 ounces 130 tons"

BRILLIANT BLOCK.—The following cablegram has been received from the head office in Charters Towers:—"Have crushed during the month 2385 tons of quartz for 2215 ounces of gold. The profit on the month's run is £3750. Have declared the usual monthly dividend of 6d. per share, payable on Saturday, April 6 next." The approximate value of this return is £7525. The share registers in London will be balanced for the payment of this dividend on Tuesday next.

BAYLEY'S REWARD No. 1 SOUTH.—The following cablegram has been received by this company's London office from the head office at Melbourne, in reply to their cablegram enquiring if the crushing had stopped for want of water:—"Crushing resumed, shall have to depend upon sufficient supply. There is a doubt about."

BRILLIANT AND ST. GEORGE.—630 tons for 640 ounces. Dividend declared, 6d.

BROKEN HILL PROPRIETARY.—For the week ending the 21st inst., 8142 tons of ore were treated, yielding 665 tons of lead, containing 222,111 ounces of silver; also 1595 tons treated by amalgamating and leaching plants, producing 13,294 ounces of silver. The price of the shares in Melbourne is £1 19s. buyers.

BUFFELSDOORN.—Cable: "Manager reports further development of the property. The White Reef and Black Reef developments are opening up splendidly."

CARMAN ALTO.—8 tons silver lead ore, ex. s.s. *Caffaro*, at Genoa, assaying 201 ounces silver per ton, 52 per cent. lead, realised net £192 17s.

DAY DAWN P.C.—The directors have sold through Messrs. Johnson, Matthey and Co. the gold, ex. s.s. *India*, which realised £4877 8s. 4d.

DON PEDRO.—The directors have received the following cablegram from the mine:—"Pump working satisfactorily. Water lowered 52 feet."

ELKHORN.—Bullion produced in the mill for the week ended March 16, 8300 ounces.

EL CALLAO.—Messrs. Baring Brothers and Co. (Limited) have received the following telegram from El Callao Mining Company: "451-475 ounces of gold produced by El Callao Mine for past fortnight, and 701-725 ounces by the Columbia Mine."

ELKHORN.—The following information has been received by cablegram from the mine:—"1750 south drift is in 755 feet. Have driven through the inside chute of ore; the total length is 16 feet; width, 2 feet 6 inches; 40 ounces per ton. Have started to raise up 45 feet; value somewhat irregular. Upon the whole, considered in relation to 1650, the developments show some improvements."

GELDENHUIS ESTATE.—The eighth annual meeting of shareholders will be held on May 1.

GALGOO GOLD FIELD.—The Exchange Telegraph Company is officially informed by Sir Malcolm Fraser, Agent-General for Western Australia, that his Government has declared a new gold field immediately south of the Murchison field. The name of the new field is Galgoo, and Mr. P. L. Gibbons has been appointed Warden.

GOLDEN AGE. MENZIES' FIND (Western Australia).—Messrs. Lewis, Hobins, and Co., 59 and 60, Cornhill, London, E.C., have received the following cablegram, dated Coolgardie, March 16:—"New lode opening up well as we go deeper. Wilson's (adjoining property) have struck rich ore on the northern boundary of our lease."

GOLD ESTATES OF AUSTRALIA.—A cablegram has been received stating that a very rich body of ore has been struck in the water shaft on the Friday Claim, Hall's Lenses. The average value is 4 ounces to the ton. The water in the shaft is drinkable.

GREAT COOLGARDIE.—The directors announce the arrival of their general manager, Mr. Bagelhole, at the mine, and also the receipt of a cablegram, dated March 18, stating that the mine has improved, and that full reports are being mailed.

GUY FAWKES REEF.—Cable "The main drive is now in 250 feet, and the reef is 2 feet, and assays 5 ounces to the ton. The face improves as we go on; crosscut to the south is now 150 feet, crosscut to the north 150 feet, and the same in No. 3 drive."

HAMPTON PLAINS ESTATE.—The manager of the company cables, under date 19th March, to the following effect:—"Have just returned from inspecting reefs recently discovered on block 50. The West Australian Gold Fields (Limited) have selected 150 acres under their concession. The reefs are exposed outside the boundaries of the blocks taken up by the West Australian Gold Fields (Limited). The reefs show visible gold. A party has been organised to develop the alternate blocks, which by terms of the concession with the West Australian Gold Fields (Limited) that company was compelled to leave for the Hampton Plains Estate (Limited). Mr. Mercer is superintending the operations, and will report fully."

IVANHOE.—Messrs. W. H. Barker and Co., 8, Finch-lane, E.C., have received the following cablegram:—"Ivanhoe struck very rich body of ore, level No. 2."

LOMAGUNDA DEVELOPMENT.—Have struck very rich ore second level shaft three.

MOSMAN.—The following cablegram has been received from Charters Towers:—"Have crushed 116 tons of stone from Wyndham shaft for 436 ounces of gold. Have also crushed 85 tons of stone from the company's tribute for 414 ounces of gold." The approximate value of the above return is £2850.

MAY CONSOLIDATED.—The following cable message, dated Johannesburg, 14th March, has been received:—"The profit for the past month (February) was £6500."

MAWSON'S REWARD CLAIM.—The manager reports:—"The tunnel on the reef has now been driven a distance of 230 feet where the reef is 6 feet wide. The reef at the bottom of south shaft is also 6 feet wide, and is being driven on both workings carrying good gold."

MILL'S DAY DAWN UNITED.—Crushed 1589 tons of quartz during the fortnight for 2225 ounces of gold. The approximate value of this return is £7675.

NEW KLEINFONTEIN.—The Anglo-French Exploration Company, as London Agents, have received advice by cablegram from the head office that dividend No. 2 of 12½ per cent. was declared on 13th March. The warrants will be sent from Johannesburg as soon as possible after the arrival of the return of transfers lodged at the office at Winchester House for registration, up to and including 26th instant. The transfer books will be closed from 27th March to 2nd April, both days inclusive. Dividends warrants for the previous dividend (No. 1) of 12½ per cent. have arrived in London, and will be sent to the owners in the course of about 10 days' time, when it is expected the audit of the accounts will have been completed.

NEW PINOS ALTOS.—The bullion returns for the five weeks ended 9th instant were $72,164; expenses, $42,500.

NEW RIETFONTEIN.—Have struck very rich ore on the 700 feet level, No. 2 shaft.

NEW ST. AUGUSTINE.—A cablegram received from the mine states:—"2200 loads washed; 126 carats obtained so far. We have not the slightest doubt that natives are stealing stones: 15 recovered to-day. The sooner compound is erected the better. The mine looks splendid; 45 claims now exposed."

NEW QUEEN.—Cablegram, giving result of crushing for past fortnight:—"255 tons, yielding 495 ounces gold. Have drawn £800. Have shipped per *Merkara* 997 ounces."

NORTH SHEBA.—The directors notify that the mines have now been duly registered in the company's favour at the Barberton Mining Commissioner's office, and that the following cablegram has been received from Captain Janson, the manager at the mines:—"The lowest level very rich pyrites; am now sending samples of the ore; the width of the reef is 10 feet; negotiating the purchase of additional stamps."

NEW HERIOT.—Cabled, dated March 18: Have declared a dividend of 25 per cent., payable to all shareholders registered March 29 (the warrants for this dividend may be expected to arrive in Europe from the head office in South Africa at the end of May next).

ORIENT.—The following cablegram has been received, dated March 19:—"Driven 10 feet for week. Splendid reef. Every 10 feet driven gives 300 feet of backs to surface opening up about 700 tons of ore."

OTTO'S KOPJE DIAMOND.—The following cable, dated 16th inst., has been received from Mr. Lisle:—"It is not impossible to put the machinery into good working order. Defective erection and manufacture have been corrected. We must now alter design slightly, cannot be ready before next week." The words "It is not impossible" are in reply to the question of the directors: "Is it possible or impossible to put the machinery into working order?" this question having been put straightly to Mr. Lisle in consequence of adverse rumours.

OURO PRETO.—This company has received a cablegram from the mines, giving the return for the month of February as follows:—"3531 tons produced 37,525 grammes = 1206 ounces."

PAHANG CORPORATION.—Output for February: In 24 days of 24 hours each, 530 tons of stone were crushed, producing 45 tons of black tin. 20 heads of stamps running; working costs, $11,750.

ROYAL SOVEREIGN.—The Lewis Mining Investment Trust have received the following cable from Coolgardie:—"Have struck rich ore 50 feet, stronger than we have seen it yet; the vein has been extensively worked by shafts; there are now tons of ore in sight."

SAN SALVADOR SPANISH IRON ORE.—The s.s. *Robert Thorman* sailed from Santander, on March 18, with a cargo of this company's ore.

SAM'S WEALTH OF NATIONS.—The following cablegram has been received from the company's manager (Captain Thomas) at the mine:—"Good gold-bearing quartz has been found in the surface workings."

SIMMER AND JACK.—Last month's profit was £6250.

SPRINGDALE.—A cablegram received yesterday states: "The mill has been started; hauling ore from Mountain Lion; sinking shaft on Gold Standard Mine."

STANHOPE.—Approximate profit for January, £1002 8s. 5d.

UNITED MEXICAN.—Telegram: San Cayetano. Gross returns for week ending 9th March, $700; expenses, $1450; loss, $750.—El Cubo. Gross returns, $7042; expenses, $6710; profit, $332. The manager added:—"The stopes are looking better next the lowest level."

VICTORIA GOLD MINING ASSOCIATION.—A cablegram has been received at the London office announcing the declaration of a dividend of 6d. per share. The manager reports new developments looking splendid, and mine looking well.

VICTORY UNITED.—Mr. Samuel James, of 8, Copthall Chambers, E.C., has received the following cablegram, dated Adelaide, 18th inst.:—"Victory United. Crushed 115 tons, yielding 229 ounces of gold."

VAN RYN.—Cablegram: Net profit for month, £2350; cyanide works, £810; total, £3160.

WARATAH.—The following cablegram has been received from the agent at Croydon:—"Developments in the lower levels most encouraging, very promising quartz since we began to sink. Will telegraph again next week. Assays made of the vein matter (lode) give value £5 8s. per ton."

WEMMER.—Net profit from operations last month, £8878.

WITWATERSRAND (Knight's).—Cablegram from the head office at Johannesburg:—"Increase capital interdicted. Accept applications accordingly."

WASSAU (Gold Coast).—The produce of the mine for the month of January last realised £1101 17s. 10d. Five stamp battery worked 14 days 15 hours, and crushed 272 tons, producing 236½ ounces standard, giving a yield of 17 dwts. per ton. In addition to this, tailings put through six stamp battery produced 46 ounces standard, making a total return of 282½ ounces standard. Cablegrams have since been received advising the remittance for last month as 306 ounces bullion, and a yield of 19 dwts. per ton.

WENTWORTH EXTENSION.—This company has acquired still further 200 acres of ground in New South Wales, adjoining its own and the Wentworth Gold Fields Proprietary Company's property on very favourable terms.

WORCESTER EXPLORATION.—Details of working for January, 1895: tons milled 2185; stamps working, 20; number of days mill ran, 29½; yield from plates 2196 ounces of gold; net profit for month, £5320 18s.

INSTITUTION OF CIVIL ENGINEERS.

AT the ordinary meeting on Tuesday last, Sir Benjamin Baker, K.C.M.G., Vice-President, in the chair, the paper read was on "Steam-Engine Economy: Condensing Engines," by Mr. Henry Davey, M.Inst.C.E.

The principles upon which the development of the steam engine as regards economy of steam were founded had been understood in the time of James Watt, who had shown that gain might be expected to result from increased expansion, and had also explained that in order to obtain the full benefit of expansion the steam cylinder must be maintained at a high temperature. Trevithick, Sims, Grose, and others had perceived that increased expansion, and consequently increased economy, might result from the employment of higher pressures. As early as 1844 the Cornish engine had been, for the steam-pressure then practicable, a more efficient engine than any other subsequently produced. Some Cornish engines at that time produced 1 I.H.P. per hour for a consumption of 19 lbs. of steam at a boiler-pressure of 30 lbs. per square inch. Their efficiency was thus greater than that of modern triple-expansion engines giving 1 I.H.P. per hour with 13 lbs. of steam at a pressure of 120 lbs. per square inch in the boiler. The triple-expansion engine was more economical because it was worked at a higher pressure and at a higher rate of expansion; but it did not utilise the pressure and expansion so efficiently as the Cornish engine had done. A period of sixty-seven years had been required for the development of the principles enumerated by Watt, Trevithick and Grose; and upwards of forty years for the reduction of the consumption of steam from 19 lbs. to 13 lbs. per I.H.P. per hour, or, in other words, for the diminution of the coal bill by one-third. In these advances no new principle had been applied, and no higher efficiency obtained.

The author had collected many examples of steam engine trials in which the mean indicator-diagrams were available, and the total feed-water per I.H.P. per hour was known. These he had submitted to analysis to localise the losses. The mean indicator-card of a given trial having been selected, a saturation-curve was delineated to represent an assumed standard for a jacketed engine, working with the steam engine cycle, and with no losses. This figure having been completed, the losses which make up the difference between the actual and the standard diagram could be readily separated, and their relative importance ascertained. The "engine efficiency" was expressed as the ratio between the mean pressure of the indicator figure, and that of the standard engine diagram. The diagrams being drawn to a scale convenient for the use of the planimeter, the area of the waste spaces could be measured and expressed as a percentage of the full area of the diagram. These waste spaces represented cylinder condensation, &c., including condensation in the jacket, clearances, compression influences being taken into account when they were considerable, and back-pressure. Having submitted a considerable number of examples of different types of engines to this method of analysis, the author showed that the economy of steam obtained by modern engines was simply due to increased pressure and increased expansion, and that the engine efficiency or the percentage of work obtained from steam of a given pressure and given rate of expansion, referred to the standard selected, was lower in modern engines than in the Cornish engine 30 or 40 years ago. It was also seen that the loss in power arising simply from the cooling influence of the cylinder-walls was not, in jacketed engines, at all events, so serious as was sometimes supposed. It was stated that the method gave practical results, and enabled defects in steam distribution to be readily ascertained; also, that the engine efficiency obtainable from a given steam distribution afforded a proper gauge of the value of that mode of distribution in point of possible economy. The average engine efficiencies, ratios of expansion, and initial pressures for the examples given, were:—

	Engine Efficiency.	Lbs. of Steam per I.HP per Hour.	Ratios of Expansion.	Initial Pressure
Cornish	73·0 ..	21·0 ..	3·65 ..	33
Single Cylinder	66·0 ..	23·5 ..	3·95 ..	76
Compound	64·0 ..	18·5 ..	7·73 ..	84
Triple Expansion	64·4 ..	14·8 ..	14·5 ..	138

The best results in individual cases, fully detailed in appendices to the paper, were much higher.

The Cornish cycle had been devised for pumping-engines in the early days of the steam-engine in Cornwall. Its effect was to maintain the working part of the cylinder at a higher temperature than would be the case if the steam were discharged directly into the condenser. It reduced initial condensation, and by this means increased the engine efficiency. The Cornish engine showed the highest engine efficiency, but it had become obsolete with the adoption of high-pressure steam, and of other less cumbersome machines giving superior economy. It embodied, however, the principles of the most advanced modern steam engine practice. The greater economy of more recent engines resulted from the use of high pressure and of greater range of expansion. The compound engine utilised the principle of the diminution of the range of temperature in the cylinder which was embodied in the Cornish cycle, but the triple-expansion engine did so more completely. In the compound engine the loss was larger with the Woolf distribution of steam than with the receiver engine, because in the Woolf engine the cylinders were subjected to a greater range of temperature, and there was greater loss of pressure between the cylinders. In an example of the triple-expansion series, given in an appendix, th

loss from cylinder condensation was about one-half of the total loss, or (say) 14 per cent. of the power represented by the standard diagram. The losses from clearances and back-pressure each amounted to about 7 per cent., so that the total average efficiency was about 70 per cent. The latter losses were nearly constant in well-made engines, and therefore, the remaining loss of 14 per cent. was the only one which admitted of considerable reduction, unless it could be shown that the assumed diagram showed too low a standard. Pumping-engines, notwithstanding the low speed at which they worked, had always been among the most economical of steam-engines. As previously stated, the Cornish engine, which was a non-rotative engine, gave a higher engine efficiency than any other. The limit of economy had, however, been reached, because it could not be worked at a higher steam pressure, nor with a greater ratio of expansion. The Cornish cycle might be made to give increased economy by a method which appeared to have hitherto escaped notice. The steam, which had done its work and had passed the equilibrium valve, possessed considerable pressure and temperature (say) a pressure of 10 lbs. per square inch and a temperature of 194° F. If a connection having a non-return valve, were made to a feed-water heater from the equilibrium-pipe, the feed-water could be heated to (say) 180° F. on its way to the boiler. This possible element of economy invested the Cornish cycle with additional importance when the question of steam-engine economy was considered.

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

The Lower Roodepoort (Limited).

The following circular has been issued to the shareholders:—"In addition to Mr. Alfred Lewis, M.E., whose report has been forwarded to you, the directors instructed Mr. A. T. Champneys, M.E., the late general manager of the New Primrose Gold Mining Company, to visit and report upon the company's mines. His report has only just come to hand, and is as follows:—'Johannesburg, February 9th, 1895. To the directors. The Lower Roodepoort, Limited. Gentlemen—In answer to your request for a report on certain claims known as the Enterprise Block, situate on the farm Vlakfontein, adjoining the well-known farm Roodepoort, West Rand district, I beg to inform you that I have visited your property, which is situated some 800 yards south of the Gipsy and Gordon Estate Gold Mining Companies, and also to the south of the Durban Roodepoort and Princes Estate Gold Mining Companies. The property consists of a block of 40 claims as per diagram, with water flowing within the boundary of the claims sufficient to supply all necessary stamping power.—Reefs: Within the beacons of your property there is an outcrop formation showing three distinct reefs. These reefs I consider to be, according to their matrix, the Kimberley and Chimes series.—Reef A: This reef, outcropping on your northern boundary, is a well-defined body of conglomerate varying about 5 to 6 feet in width, contained in true foot and hanging walls of sandstone, panning at least 18 dwts. to the ton.—Reef B: This reef, outcropping some 35 feet south of the big lode is of a different nature, being composed of a smaller pebble and a greater percentage of metamorphic limestone attached to the pebbles; this reef is also distinctly defined and carries, according to pannings taken on the ground, at least 12 dwts. of gold to the ton.—Reef C: This reef, situated to the south of the above-mentioned reefs, is a body of banket measuring some 3 feet in width, composed of a small crystalline pebble carrying heavy oxide of iron, which also shows good gold on pannings and should at a further depth, being so closely associated with the oxides, carries far better results.—Further, the whole formation of the Kimberley series as disclosed in the companies adjacent to your claims, is distinctly proved throughout your block, and from the various pannings I have made on your claims, vary considerably in richness; but I estimate the milling value of the three reefs at from 12 to 15 dwts. per ton milling value. This is quite independent of the rich leaders which are sure to be struck in your ground, and of which there are already good indications. I must also point out to you that in addition to the three reefs which are distinctly proved in your property, you must also take into consideration the fact that being due south of Roodepoort, through which the Main Reef runs in an unbroken line, you must have the Deep Levels of all the Main Reef series, and in course of exploiting the reefs already existant on your grounds you are sure to strike the Deep Level of the Main Reef at an easy mining depth. The strike of all the reefs dip to the south at an angle varying from 30° to 35°.—Mining: As regards the opening up and developing of your property with a view of extensive mining operations, which would be necessary on your deciding to erect a battery, I would suggest winzes be sunk on the reef itself, which would distinctly decide the value of your reefs in the quickest manner possible, although the large bodies of payable ore already exposed would warrant the sinking of a main shaft immediately, so that no delay should occur when the erection of the battery is considered necessary.—Water: Through the south-west corner of your property there is a permanent stream of water running, which would supply all that would be necessary for milling operations. The natural flow of the water being within the beacons of your ground is a distinct advantage as it will give you an ample supply of water from your own property, thus obviating your applying for a separate water-right in connection with the claims, which in some instances is considered necessary, but certainly not in your case, where you have so much water at your own command.—Coal: The Boksburg Railway passes within an easy distance to the north of your claims, which will enable coal and other mine necessaries to be laid down at a minimum cost.—Concluding Remarks: The natural slope of the ground will prove of distinct advantage in erecting crushing and cyanide plants, as you will be enabled to have both plants adjoining and have plenty of fall for tailings. The reefs are favourable for economical working, and the claims are in close proximity to the water and line of rail from the Boksburg coal field. I am, therefore, of opinion that the property should, with judicious management, be made to be a thoroughly payable one, and I congratulate you on having what I honestly consider a very valuable block of ground.—(Signed) A. T. Champneys, M.E., late general manager New Primrose Gold Mining Company.'"

Meyer and Charlton Gold Mining Company.

In their report for the year to December 31, the directors state:—"The profit on the 12 months operations was £53,437, or equal to about 70 per cent., to which is added the profit on 11,470 £1 shares sold at £5, viz., £45,880—a total of £99,317. Dividends have been paid for each half-yearly period—No. 14 of 25 per cent., and No. 15 of 30 per cent., totalling £42,868—besides writing off 10 per cent. of dividends, £4286 to reserve fund, and the sum of £2400 for depreciation to machinery, plant, and buildings. The balance carried forward to the credit of profit and loss account is £70,483; 1843 shares remain unissued, of which your directors propose to dispose during the current year. The reserve fund has been increased to £11,433 by the amount of £4286 written off profit and loss account, being 10 per cent. on the dividends paid. A still further and considerable reduction in working costs has been effected, equal to a saving of 4s. 7·327d. per ton as compared with the average cost of the previous year's working, the principal item of reduction being in mining (including pumping and hauling) costs, which have been brought down as low as 11s. 2·02ld. per ton. With the large quantity of ore actually developed—viz., 258,726 tons, and the special facilities for cheaper working afforded by the new incline shaft and the 60 stamp mill, with all appurtenances concentrated thereat, a long period of prosperous working is assured to your company."

Sierra Buttes Mining Company.

The accounts of the Sierra Buttes Mine for the half-year ended December 31st last show, including £2964, the moiety of profit from the Uncle Sam Mine, a balance to the credit of profit and loss of £3608. Out of this the directors recommend a dividend of 6d. per share, free of income-tax, £3062, a balance of £546 being carried forward. The accounts of the Plumas Eureka Mine for the half-year show a profit for that period of £4759, inclusive of £2964, the moiety of profit from the Uncle Sam Mine; this, with the balance brought forward, enables the directors to recommend that a dividend of 9d. per share, free of income tax, be declared, and that £4802 be carried forward.

The Libiola Copper Mining Company (Limited).

The following is from the directors' report:—The profit and loss account shows a net profit of £17,936 8s. 1d., to which has to be added the balance brought forward from last account £105 9s. 6d, making a total for the year ending December 31, of £18,041 17s. 7d., deducting the interim dividend of 2s. 6d. per share declared on August 27, £6300, there remains a balance to be dealt with of £11,741 17s. 6d. The directors recommend the payment of a final dividend of 4s. 6d. per share, payable on and after April 5, which will absorb £11,340; making (with the interim dividend) 7s. per share for the year, leaving a balance of £441 17s. 7d. to be carried to the next account. The copper market has been depressed throughout the entire year; the average price of copper for 1894 having been £40 4s. 10d. per ton, against £43 12s. 6d. per ton for 1893, and the lowest on record. Notwithstanding this, the difference of net profit in 1894 is only £692 less than in 1893. As has been the case for some years past, contracts have been made for the whole production of the current year. With reference to the mine, there is practically nothing new to report; operations continue much the same as hitherto, and there is no change to which the directors have to call special attention. The Ida gallery has not yet proved productive, but appearances and prospects still justify a vigorous prosecution of the explorations.

Bechuanaland Exploration Company.

The directors have resolved to pay a further interim dividend of 1s. per share on the shares of this company, dividend warrants for which will be issued forthwith.

— The offices of C. C. CANNELL AND CO., the NEW CRŒSUS GOLD MINING COMPANY (LIMITED), and the KOFFYFONTEIN MINES (LIMITED) have been removed to 120, Bishopsgate-street Within.

ALBION COLLIERY EXPLOSION—THE COAL DUST THEORY.—Mr. Roskill's report on the Albion Colliery explosion has been published. Apart from the magnitude of the disaster, the enquiry has a special importance and interest from the light which it throws upon, and the confirmation which it affords, of the coal dust theory. Mr. Roskill is satisfied that, whatever the cause, and wherever the initial source of the explosion, its extent, and the intensity of its ravages, were due to the coal dust in the mine. As to the intermediate cause, he expresses the view, after a careful examination of the evidence submitted to him, that the matter is now solely one of inference, and he leaves it to experts to determine whether the disaster resulted from negligence in allowing blasting during shifts. With regard to the second possibility of offence against the Act of 1887—the insufficient watering of the mine generally—Mr. Roskill is clearly of opinion that the evidence is not strong enough to justify criminal proceedings. An elaborate analysis of the case, signed by Mr. Robson, Mr. Hall, and Mr. Martin, Inspectors of Mines for the South Wales, the Liverpool, and the South-Western Districts respectively, is appended to Mr. Roskill's report. The conclusion arrived at by these experts is that the primary cause of the explosion was the firing of some gelignite, or gelatine-dynamite shots in timbers; that these shots either ignited fine coal dust directly, or a small accumulation of gas over the timbers, which in its turn ignited the dust in the vicinity, and was carried forward by the continuous train of dust existing in the roadway; and that the disastrous and far-reaching effects of the explosion were entirely due to coal dust. The opinion is also expressed that Mr. Henry Lewis, the managing director; Mr. Lewis, the agent; and Mr. Phillip Jones, the certificated manager, must be held responsible for contraventions of the Act of 1887. In concluding their report, Messrs. Robson, Martin, and Hall take the opportunity to impress upon owners and managers of mines the urgent necessity that exists for dispensing with the use of explosives as far as possible, and suggest that where explosives are used only the safest that can be obtained should be allowed. It is also recommended—(1) that all shots should be properly tamped with clay and fired by electricity; (2) that blasting should not be carried on when more than 10 persons are in a mine; (3) that blasting with gunpowder and other flaming explosives should be prohibited in fiery and dry and dusty mines; (4) and that all safety lamps should be provided and maintained by the colliery-owners, and not, as in the Albion Colliery, by the workmen.

BRITISH GUIANA'S GOLD INDUSTRY.—The amount of gold entered at the Custom House, Georgetown, on the 21st inst. for shipment by the R.M.S. *Dee*, which sailed the same afternoon, was 2874 ounces 5 dwts. 20 grains to the value of $51,010·44, being a decrease of the previous shipment of 4431 ounces 6 dwts. 9 grains to the value of $79,193·26. With this addition the total output for the year amounts to 9510 ounces 18 dwts. 13 grains, to the value of $169,651·35. The following is the returns of gold entered at the office of the Department of Mines for the weeks ending:—

	Feb. 16.				Feb. 23.				Mar. 2.			
	ozs.	dwts.	grs.		ozs.	dwts.	grs.		ozs.	dwts.	grs.	
Barama ...	80	1	19	.....	47	19	21	.....	25	6	10	
Barima ...	212	8	5	.....	92	10	17	.....	882	7	5	
Cuyuni.....	538	14	5	.....	238	9	6	.....	417	1	7	
Essequebo..	288	5	9	.....	273	11	23	.....		—		
Groete Creek	3	3	3	.....	5	3	0	.....		—		
Mazaruni...		—		.....		—		.....	126	18	3	
Potaro	266	3	19	.....	532	12	1	.....	343	3	18	
Puruni		—		.....	277	15	7	.....	269	11	18	
Total	1,389	2	12	.....	1,463	2	3	.....	2,497	18	20	

The exports of gold from January 1 to March 4, 1895, amounted to 11,388 ounces 14 dwts. 14 grains at $202,445·13, against 7851 ounces 17 dwts. 19 grains at $140,427 for the corresponding 1894.

The LIST of APPLICATIONS for SHARES will CLOSE on SATURDAY, MARCH 23, at Two p.m., for both TOWN and COUNTRY.

The required capital has been guaranteed by the London and Western Australian Exploration Company (Limited), the companies associated with them and other parties, but no preference will be given in the allotment to the guarantors.

LATEST CRUSHING.
Received by Cable, March 7th, 1895.
"'Day Dawn,' 500 tons, 384 ounces; Plates, 280 additional."

The LONDON and WESTERN AUSTRALIAN EXPLORATION COMPANY (Limited) INVITE SUBSCRIPTIONS for the undermentioned Capital of

THE CONSOLIDATED MURCHISON GOLD MINES, Limited,

WESTERN AUSTRALIA.

Incorporated under the Companies Acts, 1862 to 1890.

Capital - - - - - £250,000,

in 250,000 SHARES of £1 EACH,

Of which 90,000 are to be allotted to the Vendors as part of the Purchase Money, 15,000 are held in reserve for future issue, and 145,000 are now offered for Public Subscription at Par.

Payable:—2s. 6d. on Application, 7s. 6d. on Allotment, and the balance by two instalments of 5s. each, payable One Month and Three Months respectively from the date of Allotment.

Directors.

THOMAS J. BEWICK, Esq., Chairman Van Ryn Gold Mines Estate (Limited).
Lord DOUGLAS of HAWICK and TIBBERS, Local Director West Australian Goldfields (Limited).
H. CLAUDE LYALL, Esq., Director London and Western Australian Exploration Company (Limited).
C. GIBSON MILLAR, Esq (Messrs. C. and E. Millar, Melbourne), Director Gold Estates of Australia (Limited).
Col. R. PARRY NISBET, C.I.E., Director Great Fingall Reefs (Limited).

Bankers.

The LONDON JOINT STOCK BANK (Limited), Lothbury Office, 6, Lothbury, E.C.

Brokers.

London: Messrs. COOK and LOMER, 2A, Copthall Court, E.C. and Stock Exchange.
Edinburgh: Messrs. HARDIE and TURNBULL, 42, George-street.

Consulting Engineers.

Messrs. BEWICK, MORSING, and CO., Broad Street House, E.C., and Western Australia.

Solicitors.

Messrs. CARPENTER and THOMPSON, 4, Trafalgar Square, W.C.

Auditors.

Messrs. MONKHOUSE, GODDARD, and CO., 28-29, St. Swithin's Lane, E.C.

Secretary.

H. SLANEY, Esq.

Offices.

BROAD STREET HOUSE, NEW BROAD STREET, LONDON, E.C.

PROSPECTUS.

This Company is formed to acquire and work an important group of Gold Mines situated on the Murchison Gold Field in Western Australia.

The property to be acquired comprises six mines, held under the usual mining leases of Western Australia, and known as the "Day Dawn" (No. 69), "Day Dawn West" (No. 136), "Day Dawn North" (No. 70), "Rubicon" (No. 329), "Rubicon North" (No. 231), and "Strathmore" (No. 291), the whole covering an area of about 91 acres, upon which a large amount of development work has been done, and active operations are being carried on at present with a 10 stamp battery and full plant.

The following cable report has been obtained by Messrs. Millar and Horn, on behalf of the West Australian Day Dawn Mining Association (Limited), from Messrs. Bewick, Moreing, and Co., mining engineers, whose representative, Mr. W. A. Mercer, examined the property:—

"DAY DAWN, MURCHISON.—This property is two hundred miles from Geraldton, four miles from Cue, and comprises twelve acres, the country rock being gneiss. The reef running through the property strikes north-west by south-east, and underlies 65 degrees south west, whilst it varies in width from 9 feet to twenty-four feet, the stone is dark blue, carrying fine gold, and will average twenty-three pennyweights per ton.

"The shaft has reached a depth of one hundred and twelve feet, and plenty of water is to be obtained. To the south west of the lode a new shaft has been sunk one hundred and fifty feet, and ample water is available for the present twenty stamp mill. The reef to the north has been worked by an extensive opencut, from which about one thousand tons have been crushed.

"The cost of mining and milling has been £1 5s. 9d. per ton, but this has been reduced to 18s. per ton.

"DAY DAWN WEST.—This property comprises twenty acres, the width of the vein being two feet six inches, and having a bold outcrop. We understand that fifty tons of material crushed yielded four ounces of gold per ton. This reef will, in all probability, effect a junction with Day Dawn about a chain from the northern boundary.

"PLANT AND MACHINERY.—This comprises an engine of 30 h.p. two Cornish boilers 25 h.p. each, two vertical boilers, 12 and 14 h.p. respectively, double hoisting engine, Huntingdon mill with engine and boiler, tables and vanners, two crushers, and twenty stamp mill complete.

"RUBICON PROPERTY.—This property is situated one and a half miles from Day Dawn, and comprises two leases of twelve acres and eight acres, twenty chains on the line of reef, which varies in width from two feet six inches to five feet. Thirty tons of vein matter have been crushed, yielding a return of three ounces per ton.

"STRATHMORE PROPERTY.—This property is situated two and a half miles from Day Dawn, and comprises twenty acres, the reef being two feet in width. Three hundred and fifty tons of material have been crushed, giving a return of sixteen pennyweights per ton. As it has been decided to introduce Cyanide treatment, milling has been carried on with coarse screens, the loss in tailings being nine pennyweights per ton.

"GENERAL.—The vast size of the reefs and uniform value assure a steady paying concern, if sufficient plant be provided for large and continuous crushing. The property promises to be a good staying concern, and can be thoroughly recommended.

(Signed) BEWICK, MOREING and Co.

"Dated London, October 27, 1894.

To the present 20 stamp plant it is intended forthwith to add a further 30 stamp battery, and Cyanide works for the treatment of the tailings.

In the present state of development, it is estimated by Mr. Armstrong, the Mine Manager of the West Australian Day Dawn Mining Association (Limited), according to a cable from Mr. W. R. Wilson, one of the directors of that Company, that there are 70,000 tons of ore in sight upon the "Day Dawn" block, so that it would appear that the proposed battery can be kept supplied from this section alone, while the property is so extensive that there is room for even a larger number of stamps. Taking as a basis the above estimated yield and working expenses, the ore reserves in sight on the "Day Dawn" block should represent a net value of about £175,000, and, as it is intended to carry on extensive development work upon this and other portions of the property, it is thought that the ore reserves can and will be kept well in advance of the requirements of the proposed crushing plant.

The vendor, who is the promoter of the Company, has fixed the price to be paid for the property at £90,000, payable as to £30,000 in fully-paid shares, £5,000 in cash, and as to the balance either in cash or fully-paid shares, or partly in cash and partly in fully paid shares at the option of the directors, leaving 35,000 shares available for working capital, of which 15,000 shares are included in the present issue.

Full Prospectuses and Forms of Application may be obtained from the bankers, brokers, solicitors, and of the secretary, at the offices of the Company.

London, March, 1895.

C. PASS & SON (Limited), BRISTOL,
ARE BUYERS OF
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c. and DROSS or ORES containing
TIN, COPPER, LEAD, AND ANTIMONY.

HENRY WIGGIN & CO. (Limited),
NICKEL AND COBALT REFINERS,
MAKERS OF BEST RED LEAD FOR FLINT GLASS MANUFACTURERS,
BIRMINGHAM.

LAMBERT'S WHARFAGE CO.,
PRINCE OF WALES DOCK, SWANSEA.
Ores, Mattes, Regulus, and Bars received and prepared for market. Copper, Lead, Tin, Spelter, and Pig Iron Received, Weighed, and Sampled, and Warrants issued against same.
N.B.—Warrants are on accepted list of London Metal Exchange.
Regular lines of steamers from America, Europe, &c.
Consign goods to Lambert's Cranes, Prince of Wales Dock, Swansea

THE BUTE WORKS SUPPLY COMPANY,
133, BUTE DOCKS, CARDIFF.
Telephone: No, 45 (Post Office and National).
Telegrams: Gething, Cardiff.

RAILWAY WAGONS (New and Second-hand) for Cash, Redemption Purchase, Simple Hire, or Tonnage Hire. 50 perfectly new, 50 only 10 months old, and 130 only three years old, all to Latest Regulations, now here ready for Lettering. A large number of other Wagons, now on tonnage hire, for Sale. Full particulars on application.

LIME WAGONS.—12 10-tonners, with covered tops, two side doors, and four roof doors, £32 10s. each at Cardiff.

EARTH WAGONS.—75 side and end tipping, 30-inch gauge, new frame, and new tops, steel wheels and steel axles, £5 each, f.o.r. Cardiff.

RAILS.—Bridge, Flange, Double Head, and Bull Head, with or without fastenings.

SLEEPERS.—Wood and Steel for all gauges.

PORTABLE RAILWAY.—£9 18s. 9d. per 100 Yards of Railway, comprising 200 yards of new Steel Rails, 14 lbs. per yard, and 100 Iron Sleepers, 24 inches gauge.

LOCOMOTIVES.—Six wheels coupled, by Manning, Wardle, and Co., 12 inches by 17 inches, now at Cardiff; also six wheels coupled, by Avonside Engine Company, 14 inches by 20 inches, now near Cardiff; both recently thoroughly overhauled, and ready for instant work; cheap for cash, or three years' redemption purchase.

PACIFIC MINING AGENCY AND TRUST COMPANY.
A Corporation organised under the Laws of the State of California.
CAPITAL STOCK, £50,000.
BOARD.
IRWIN C. STUMP (Chairman) Manager of the Estate of the late U.S. Senator Hearst.
IRVING M. SCOTT, Manager Union Iron Works.
JACOB H. NEFF, President California Miners' Association.
P. N. LILIENTHAL, Manager Anglo-California Bank (Limited).
W. F. GOAD, Vice-President, Wells, Fargo, and Co.
D. M. BURNS, Capitalist.
R. C. CHAMBERS, Manager Ontario Mine, Utah.
WILLIAM C. RALSTON, Secretary (Secretary California Miners Association).
BANKERS—The ANGLO-CALIFORNIAN BANK (Limited).
HEAD OFFICE — MILLS BUILDING, SAN FRANCISCO, CAL.

THIS COMPANY sells Mines, Mining Claims, Ditch Properties, and Water Rights ON COMMISSION, and will act as Agent and Broker for the Sale and Purchase of such Properties.
It is intended to conduct the Purchase and Sale of Mining Claims, Ditch Properties, and Water Rights on the same basis as a real estate transaction.
The Company is prohibited by its Articles of Incorporation from buying or selling on its own behalf, or except upon commission, or as agent or factor for others.
The buyer pays no fees whatever, and there is no incentive to advance the price beyond the original figures at which the price and commission have been agreed upon with the seller.
It is not intended only to negotiate the sale of an entire property but interests in such may be sold or money obtained for development work.
This Company especially solicits the business of making reports or examinations for non-resident mine owners on any of their mines in the United States, and obtaining special information as to their condition and so forth (said reports being confidential).
Those who conduct the business of the Company have had long experience in mining operations, and it is their intention to place the Company in a position to inspire the confidence of all who seek its assistance in its integrity and fair dealing.
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LONDON: MARCH 23, 1895.

SUMMARIES OF MINERAL STATISTICS FOR 1894.

THE appearance of the annual summary of statistics relating to the mines and minerals of the United Kingdom, is one of those landmarks of the year's progress which is always eagerly looked forward to by all interested in British mining matters. In these we get, in a condensed but thoroughly intelligible form, an abstract of the result of the past year's work, rendered all the more striking, probably, on account of its brevity. The fluctuations of British mining are recorded with official impartiality; and though the serried columns of figures may at first sight look dry and repellant, their interest, when they come to be studied, is thoroughly live and real. They are the palpitating record—in a country which depends so largely upon mining for its prosperity—of the heart-throbs of the nation's existence. This is always the chief interest which the annual summary has for us all; but this year it presents a feature of subordinate interest, which has, nevertheless, an importance of its own. This year, the recommendation of the Departmental Committee on Mining and Mineral Statistics, the issue of whose report was noticed in these columns a few weeks ago, are being carried into effect, and it is important to see whether the alterations are in every case really improvements. We note, in the first place, that the summary has appeared much more promptly than in previous years, being nearly a month earlier in 1895 than it was in 1894. *Bis dat qui cito dat*, says the old proverb, and in this case it is peculiarly applicable. Accurate statistics are always welcome, better late than never, but their value is immeasurably enhanced when they are forthcoming whilst interest in them is still fresh. It may seem ungracious to grumble when so considerable a step as the gain of a month has been realised; but we cannot see why in future years the summary should not appear still earlier. Seeing that monthly returns are made in most cases, there is little to do when the December returns are in but to add these to those already obtained; and we hope that when better organised and extended, as recommended in the report of the Departmental Committee, the Mineral Statistics Branch of the Home Office will be able to issue its summaries at least as promptly as does the Board of Trade, for instance. There is another feature, too, in which we could wish that the former Department would follow in the track of the latter, and that is in including in the summaries not only the quantities of mineral raised, but also their values. This would mean only the addition of a couple of pages to the summary, and the data required for their compilation must be in the hands of the Mineral Statistics Department at as early a date as those referring to the tonnage, whilst the information thus conveyed would be of inestimable value to all engaged in any trade connected directly or remotely with mining. We can well understand that the classic calm of a scientific department of the Home Office is so far removed from the turmoil and storms of commerce that those at the head of such a department may readily overlook, or fail to understand, the needs of those engaged in the struggle for existence or the race for wealth. We, however, venture to think that we represent the opinions of the latter when we set forth the importance to all business men, of knowing the value as well as the tonnage of mineral raised. How else, indeed, can the prosperity of the industry be gauged? It may well happen—it unfortunately happens not unfrequently—that the tonnage of mineral production increases, whilst its value recedes; it is obvious which figure forms the true test of the condition of the industry under such circumstances.

The statistical summaries hitherto published have for some years past comprised two separate parts. The first part consisted of 13 tables showing the number of persons employed, the quantity of mineral produced, and statistics of accidents for the year just closed; whilst the second part contained corresponding statistics for the 20 previous years, thus affording at a glance valuable comparative data indicating the increase or decline in the production of any particular mineral or the fluctuations in any required item. This year the statistical summary consists only of the 13 tables of the first part as thus defined, and we are promised the information which used to be contained in the second part in an annual general report in accordance with the recommendations of the Departmental Committee before alluded to. Fortunately, the totals for the previous year are given in a large majority of cases, notably in those tables referring to the number of persons engaged in mining and to the number of accidents. These totals are also given for eight of the more important mineral products—important, that is to say, as regards the quantity raised, irrespective of their value—but for all other minerals the amounts raised in past years are not given. Moreover, owing to the arrangement of the tables, the total amount produced even in the year itself can only be obtained by taking out the totals for each district and adding them up. Thus, anyone interested in knowing the production of zinc or copper ore in Great Britain during 1894 would have a good deal of work to go through before his curiosity could be gratified; and even then, he would be unable to compare the production with that of 1893 unless he happened to have a copy of last year's mineral statistics at hand. This information, which used to be contained in those very valuable tables Nos. 17 and 18 of the old statistical summaries, is not obtainable at all, except for the small number of minerals above-named, in the new summary, and its absence is sure to be severely felt. We do not say that a complete table for 21 years is absolutely needed in a summary such as this, but we are very decidedly of opinion that a table showing the quantity and value of every class of mineral produced for the year under consideration, as well as for the previous one, or the previous two, would be a boon greatly appreciated, and we venture to think that its insertion would not greatly delay the appearance of the summary, nor that it would entail on the Department of Mineral Statistics an amount of labour at all commensurate with the benefit it would confer upon the mining public.

Turning now to the summary itself, let us see what light it throws on the status of British mining in 1894. Our great staple, of course, is coal, and we find that the total production was 188,277,525 tons, an increase of some 24 million tons upon 1893; this, however, was the year of the great coal strike, and hence this information would mean very little, did we not see, on turning to that useful table in last year's summary, to which we have just referred, that it means an increase of 6,500,000 tons above 1892; in fact, it is our record so far—the biggest production (by over 2,750,000 tons) to which we have ever yet attained.

In addition to coal mines, there are grouped under the Coal Mines Regulation Acts, mines of ironstone, fire-clay, oil shale, &c., and the total production of mines under these Acts was 199,451,018 tons. There is a slight increase in the number of mines at work, being 3419 in 1894, as against 3383 in 1893, and the total number of persons employed—namely, 705,240, shows an increase of over 22,000 persons above those of the previous year, and is again a record number. At the same time, the tonnage per person employed also shows a decided improvement upon the results of 1893. Turning to the fatal accidents, we

find that there has here been an increase of 67—namely, to 1127. This figure, alarming as it looks, amounts, however, to not more than 1·598 per 1000 people employed above and below ground, being a very slight increase indeed on the previous year; calculated upon the tonnage raised, it amounts to 5·651 per 1,000,000 tons of mineral produced, a decided decrease on the preceding year, and, strangely enough, almost exactly the average of the 10 previous years. We may, therefore, deduce from the summary the gratifying conclusion that the coal industry is in a satisfactory condition. It does not, however, appear from these figures, how much of this satisfactory condition is due to the compression into one year of the normal improvement, which would under ordinary circumstances have been spread over two years, had not the disastrous coal strike converted such normal advance into an abnormal retrocession in 1893.

Turning to the mines governed by the Metalliferous Mines Regulation Act, it is, as we have already pointed out, difficult to arrive at satisfactory information except in a few special cases. It is only in the cases of iron ore, lead ore, slate, and stone, that the total production for 1894, and for the preceding year, are given; the quantities raised are, respectively, 2,263,986 tons, 39,886½ tons, 171,145 tons, and 709,934 tons. The only one of these products that shows any improvement in this year over the previous one is slate, in which an increase of nearly 11,000 tons is recorded. In all the others a diminution of production is shown by the tables. The total amount of minerals under this head is returned as 3,671,228½ tons, being a decrease of close on 100,000 tons below the previous year. The bulk of this diminution is due to the marked falling-off in the amount of iron ore raised, chiefly in the Cumberland district. When it is remembered that 1893 was the year of the great coal strike, and that a small coal output means, *ex ipso*, a restricted demand for iron ore, this diminution assumes a serious aspect, and seems to point to the conclusion that native hematite ores are being increasingly supplanted by imported ores.

The ores lumped together in this table as "other minerals" contribute a total amount of 486,277 tons, as against 482,813 tons in 1893. Some of these minerals, whose totals can only be ascertained by a close examination of the table, and by adding the figures credited to the various districts, are of great interest to British metallurgists. Thus we see that the quantity of copper ore produced in 1894 was 6345½ tons, as against 5346 tons in 1893, and of copper precipitate 241½ tons, the latter showing an improvement of 11 tons over the preceding year. Gold ore—exclusively produced in Wales—amounted to 6603 tons, being an increase of over 2000 tons over 1893; a production which has thus risen 50 per cent. over that of the year before should augur well for the future of the Welsh gold mines. Unfortunately there is nothing to show what was the richness of the ore so raised, or even whether it is likely to be worth milling or not. Manganese ore, 1778 tons, shows a small improvement on the previous year. Tin ore returned as 11,446 tons of dressed, and 1680 tons of undressed ore, shows in each case a falling-off from the output of the year before. The total for 1894 may be taken as equal to about 12,390 tons of dressed tin ore or 1300 tons less than the quantity produced in 1893. The total quantity, finally, of zinc ore produced was 21,676 tons or 2000 tons less than the produce for 1893.

This being the state of affairs as far as quantity of material raised is concerned, we find ourselves, as before pointed out, in the difficulty that we cannot judge from these tables to what extent the diminution of output from the mines classed under the head of metalliferous, means a shrinkage of value. Of course, we, from our own knowledge of the condition of the various metal markets, have but too good reason to know that the prices realised were far from being such as could counterbalance the decreased production, but rather the reverse. It is sad to see that there were but 740 metalliferous mines at work in 1894, as against 825 in the preceding year; we find, too, a very sure indication of the decadence of British metal mining in the fact here recorded, that the number employed in these mines—namely, 83,857—shows a decrease of 1882 below those employed in 1893, being indeed the lowest recorded in the table in last year's summaries, which go back as far as 1873. This is, unfortunately, very strong presumptive evidence of the decay of metal mining in Great Britain. It is some satisfaction that the total number of deaths—namely, 46, is 19 less than in 1893; this figure gives a rate of mortality of 1·359 per mill, considerably lower than in the previous year, and a trifle below the average of the past 10 years.

Upon the whole, then, this summary of mineral statistics is scarcely one to be perused with unmixed feelings by those interested in British mining. Metalliferous mining is in anything but a prosperous state as far as the tables before us show, but it is gratifying to see that our output of mineral fuel appears to be a steadily increasing quantity, when the balance of trade is not disturbed by strikes, which seem to bring nothing but disaster to all engaged in the industry which they affect. Of the many lessons which this summary of mineral statistics teaches to those who have eyes to see, this last is, perhaps, not the least important.

SYNDICATES.

WE have often in these columns described the various stages in the history of a mining company, but hitherto have left the question of syndicates untouched. The present revival of interest in mining matters, both in South Africa and Western Australia, seems to us, however, to be a favourable moment for devoting a little space to this subject, which is of interest to all, and which is, indeed, an important item in the promotion and subsequent flotation of a company. The original owner or vendor can rarely come into direct contact with a promoter sufficiently strong of himself to take upon him the full responsibility of the formation of a company; and, indeed, there are very few of this genus still extant. We are frequently brought in contact with a combination of promoters who, on the principle that union is strength, have joined themselves together for business purposes in what is called a syndicate, whose object is to receive and consider the various propositions made to them, and out of these to choose one or more which they believe present a fair chance of being successfully handled, and, finally, to put the undertaking before the public in the form of a Limited company. This, indeed, in its original conception is a legitimate form of business, and as long as the directors of the syndicate are responsible men, careful in their selection of mining properties, and guided by the best professional advice, they form a sort of a safeguard that only those mines which offer a reasonable prospect of paying dividends to their shareholders shall be brought out.

The board of such a syndicate should consist of moneyed men, used to financial transactions; a broker or two, with a circle of well-to-do clients; a solicitor, well up in the intricacies of company promotion; and a mining engineer, who may either be a salaried officer of the company, or have a seat on the board by virtue of his technical knowledge. A mining scheme laid before such a board would have every chance of being studied in its financial, legal, and technical bearings; and, if its examination under these heads has been honestly conducted, the mere fact of its being brought forward by such a syndicate should of itself be a guarantee as to its soundness. We must not, however, close our eyes to the fact that during the excitement of a boom there is sometimes a tendency to bring forward rather such proposals as, for the moment, may be in especial favour with the public, than those which in themselves offer the best openings for investment. On the one hand, the promoters are desirous of seizing the most favourable opportunity for flotation; and, guided by the same principle, the vendors endeavour to rush the scheme through, leaving but scarcely time for its thorough and independent examination, and still less for a preliminary trial, and so one of the main objects of a syndicate is apt to be defeated. Now, syndicates do not work for nothing; nor is it anything but fair that they should receive a reasonable return for the risk they have undertaken in taking up the preliminary investigations, which often also involve the payment of a substantial deposit, costly cables, and fees for the report of independent experts, as well as the dangers connected with underwriting. There is, nevertheless, a considerable margin between moderate and exorbitant remuneration for their services, the more so, because it is often the working capital which suffers. Here we drop upon a very delicate question, for we notice in reference to recent issues, that the amount reserved for working capital is often totally inadequate, being sometimes less than one-fifth of the total capital. Yet it is solely upon the judicious employment of this modicum of working capital that the success of the whole concern depends. Over and over again it is found that the sum set aside for this purpose is totally insufficient, and anyone acquainted with the history of mining companies is but too familiar with the difficulty of providing extra capital to complete the works when the original sum is exhausted, and knows that many a gallant company with a really good mine has been wrecked upon this particular rock.

That there is ample room for increased caution on the part of promoting syndicates is, we think, fully demonstrated by a report recently published by the Board of Trade on the working of the Companies (Winding-up) Act during 1893, which, although not dealing exclusively with mining companies, yet affords some valuable and striking information. From this we gather that the new concerns started during that year numbered 4332, while the number of companies in which winding-up proceedings were begun was just over 2000, or 43·65 per cent. That year may have been exceptionally unfortunate in this respect; but if we take the average of the decade 1884-93, the general result show that only 43·33 per cent. remain in existence for a reasonable period. Surely we have in these startling figures sufficient cause to urge upon the syndicates to examine vigorously the intrinsic value of the properties, for the working of which they propose to form companies before inviting subscriptions from the public, who, in the enthusiasm of the moment, or from a desire to become rich without personal exertion, are often led into enterprises unworthy of their confidence. Syndicates cannot, of course, be expected to take a paternal interest in each of their possible shareholders, but it should be remembered that the total capital of the 18,361 companies in existence in the United Kingdom in April of last year amounted to the enormous sum of £1,035,029,835, and this fact alone should emphasise our contention on behalf of the use of greater care and discretion by syndicates of the projects they take up. We, of course, are more particularly interested in mining matters; and it is our desire, as evidenced by our numerous leaders on the subject during the past year, to minimise the list of unsuccessful mines by pointing out some of the more prominent causes of failure in these undertakings. As we have already pointed out, syndicates honestly conducted are a necessary and legitimate accessory to the promotion of mines. Their members are often men of high commercial standing, and by finding the capital for the preliminary operations they are frequently of great service, not only in bringing undertakings of *bona fide* value before the public, but also in weeding out others presenting less prospects of success.

GOLD MINING IN WALES.

IN consequence of delay in examining the various properties our Special Commissioner has been unable to prepare his articles for this week's issue. They will commence in our next.

NOTES AND COMMENTS.

THE half-yearly report submitted to the shareholders of the Broken Hill Proprietary Company at their meeting in Melbourne on the last day of January, affords not the smallest ground for the supposition that the huge output of the concern will suffer any diminution, at all events in the near future. Operations are being carried on in the mine with the due admixture of caution and enterprise, so as to maintain, so far as possible, the balance between the interests of the future and those of the present. As to the former, an exhaustive calculation, based on the most careful examination of the ground, leads to the conclusion that there are 1,000,000 tons of payable ore in the mine of such a character as to be suitable for direct treatment. Outside this there are, of course, large quantities of ores and sulphides amenable to treatment by the concentrating plant now practically completed, and in effective working order. The character of the metal itself is a highly satisfactory one. The authority of Professor Roberts-Austen testifies, first, that the ingots are "of a higher standard of fineness than is usually the case with commercial silver," and that there is ground for "perfect confidence in the suitability of the metal for any purpose for which silver is usually employed, such, for instance, as for the production of salts of silver, or for the manufacture of silver plate or ornaments."

TURNING to the accounts, the central fact for the period under review is the realisation of a net profit during six months of £343,216. Of this sum £288,000 was paid to the shareholders in dividends, while the balance to the credit of profit and loss has, by the addition of the remainder, been increased to £600,485. One of the most largely-contributing factors to the present satisfactory position of the company is the introduction during the past year of some economies, judiciously conceived and firmly carried out. Some idea of the magnitude of the reductions made is gathered from the fact that the cost of production per ton of ore treated has fallen from £2 12s. 6d. to £2 3s. 7d. It is clear enough that to secure so large a shrinkage in the costs must have required the exercise of the greatest judgment, and its successful accomplishment reflects the greatest credit upon those concerned in the management. Concurrently with the main operations at the mine, the board have inaugurated a set of subsidiary works in certain directions, which, up to the present, have answered very satisfactorily. Thus a considerable proportion of the crude sulphides is now being treated weekly in the furnaces at the mine, while a small iron foundry has been erected for recasting the waste cast-iron. The dominant feature of the board's policy appears undoubtedly to be a certain happy blending of cautious conservatism with enterprising innovation.

MR. J. H. COLLINS, in his accession to the presidency of the Institute of Mining and Metallurgy, will receive the best wishes of all those who are to sit under his ruling. All the qualifications necessary to successfully fulfil the duties of the delicate and responsible office he has undertaken are his to an eminent degree. His reputation as a miner with metallurgical leanings could not well be higher, his style of speech is graceful, appropriate, and pithy, and the unvarying courtesy which is the prominent characteristic of his manner supplies the most convincing evidence of his peculiar fitness for the post to which he has been elected. It is fortunate that with the President of the Institution a rule obtains different from that which restricts the Chairmen of most meetings from contributing largely on their own initiative to the business going forward. Mr. Collins rarely speaks—never, certainly, at any length—without adding something of permanent interest to the sometimes fleeting, unsubstantial, and valueless chatter that finds embodiment in the curiously-covered *Transactions* of the Institution under the heading of "Discussion." We shall look forward with confidence to the future career of the Institution under his guidance.

WHILE there can hardly, perhaps, be said to have been any fundamental changes in the international situation so far as our commercial stability is affected, since our last reference to the subject some months ago, it is happily the fact that the various political crises then pending have lost much of their acuteness. Everybody is troubled with the monotonous course of events in connection with the Eastern war, and the inevitable termination is devoutly wished for. An ultimatum has been sent to Nicaragua, warning them that the anger of England is a different class of affair from the petty spite of the crowd of restless States in the Panama, and if there is anything in probabilities, the affair should come to a speedy termination. There is little of a disquieting nature here. Nearer home, France has become rather quieter—if the word is ever applicable to her internal condition—while almost the only grave symptom of impending disorder is the extraordinary outburst of subaltern lawlessness in Madrid, and the consequent change of Cabinets. So far, therefore, as our commerce depends upon international agreement, the outlook is highly favourable—much more so than for some months past.

ANOTHER of the terrible coal mine explosions that from time to time startle and horrify the world has occurred—this time in Silesia. The roll of the dead is not so long in this as in many of the cases of extensive explosion, but is serious enough to warrant the most careful and deliberate enquiry into the prime cause of the disaster. Occasions of this kind are apt to engender sorrowful reflections as to the incomplete and partial success attending the most elaborate precautions that science can dictate and mechanical skill carry into effect. It is surmised that in this case the explosion, with its list of 50 deaths, is due to the accidental ignition of a packet of cartridges carried by the foreman in his pocket. Perhaps the truth—or error—of this supposition will never be known, the foreman himself being among the

list of victims. In any case, the mournful occurrence cannot fail to impress all connected, remotely or nearly, with the responsible task of watching over the safety of the workmen in a mine, that the exercise of the utmost prudence and care is but their bare duty.

The urgency of the necessity for revising the Companies Acts becomes more and more manifest as the matter is examined. Statistics publicly quoted at Sheffield this week showed that the number of companies registered in April, 1894, was 18,361, with a paid up capital of £1,035,029,855. Since the 1832 Act came into operation, 44,600 companies, with a nominal capital of £4,313,598,648 had, up to that time, been registered. This included one company reregistered in 1869, with a nominal capital of £100,000,000, but which never appears to have had a paid up capital of more than £200. Of these only a little over 41 per cent. had an existence in April, 1894, nearly 59 per cent., having from one cause or another been wound up or dissolved. We have every faith in the joint-stock principle. It enables individuals in combination to accomplish what is impossible separately. Union is strength. It is bad for trade for the joint-stock principle to fall into disrepute. Yet, this it will assuredly do, unless Parliament takes up the overhauling, if the Companies Acts are in earnest. The sooner they do so, the better for legitimate investment.

The remarkable technical progress which has of late been made in the gold mining industry is the more deserving of attention because of the opening up, to British and other capital which it promises to afford, of deposits extensive, indeed, but not hitherto capable of remunerative treatment. We have never hesitated to point out that the crucial factor in successful gold mining, as a legitimate investment, must be the economy of working expenses. There is no process by which richness of gold-bearing reefs can be secured, and the best thing that can happen for the shareholders is to realise that honest development, rather than luck, must be depended upon for dividends. It is eminently satisfactory, therefore, to see the wide feeling of interest awakened in the further possibilities of that already wonderful achievement of practical science—the recovery of gold from tailings. The application of cyanide of potassium to this purpose has, as our readers are aware, been the turning point in the history of the gold mining industry on the Rand. But we are now hearing of other inventions, said to be not only cheaper, but warranted to extract a greater percentage of gold. We have had, as yet, no practical results of these on a large scale, but it all goes to prove that the gold mining industry has a wonderful future awaiting it.

The principles of mine management have recently been under discussion in some of the American papers. A Denver mining man "opines" that in the matter of mining success business aptitude counts for more than scientific knowledge. It is evident that, to him, the scientific working of a mine presupposes the "kid glove and champagne" management that many practical mining men regard with a holy and righteous horror. When questioned they may not be able to specify where they have known a mine management whose office runs in champagne and is littered with cast-off pairs of gloves; nor has it come continuously within their experience that the man with kid gloves has invariably ruined the mine under his control, while the horny-handed son of the pick, crammed with accumulated experience and a resultant rule-of-thumb, has with similar certainty brought large profits out of the ground to the satisfaction of the London shareholders. Nevertheless, the prejudice remains, and is likely to remain for some time, notwithstanding that the general confidence in scientific methods has continually increased. There is a narrowness about practical methods which may be carried to as great an extreme as its opposite.

A San Francisco journalist has recently deplored the decadence of the Western financial world. New enterprises—where anything like co-operation is essential to success—are not taken up with that avidity and haste which is presumably the first condition of a healthy industrial period. Occasionally the mourner's indignation gets the better of him, and he bursts forth into reproachful invective—as when he says:—"San Francisco can boast of the most cowardly and selfish set of moneyed men in the world." Philanthropy is not the dominant characteristic of all, or even many, of the world's greatest financiers. "Live and let live" is a maxim that generally guides them; first giving free play to the instinct to life and acquisition that is in them, and then—afterwards—so moulding their operations as to interfere as little as possible with the aims and efforts of other people. This complaint as to reticence and want of enterprise is not at all consonant with the frequently-expressed apprehensions of a glut of capital—using the word in a wider than its economical sense—and the approaching extinction of interest. The unrealised ideal of a time when the "cobwebs of selfish egotism" are "swept away"—the metaphor reminds one forcibly of the New World—is one that, to our thinking, is hardly attainable.

The West Australian Gold Fields.—Another map of West Australia has just been published by the West Australian Gold Fields (Limited), covering more especially the richer auriferous areas of the now well-known colony. The map is clearly marked, brilliantly coloured, and of large scale. It has been compiled from the Government maps, and corrected by the Hon. H. J. Saunders and Mr. R Herbert Lapage, and measures 27 inches by 25 inches; it shows the situations of all the newly-formed mining camps, such as White Feather, Hannan's, Menzies', Mount Margaret, Black Flag, &c., &c., and will undoubtedly be of great advantage to all who take an interest in the Colony of West Australia, as it will enable them to see at a glance in what position on each particular gold field the properties in which they are specially interested are situated.

— Letters of allotment in the Royal Sheba (Limited) have been posted.

— A dividend of 25 per cent. has been declared in the New Heriot Gold Mining Company.

THE MINING MARKET.

Friday Evening.

Attention diverted from gold to land companies' shares in the Kaffir section.—Westralians in improved demand.—A big business in the Miscellaneous department.

A WEEK of many fluctuations has resulted in fewer important changes on balance than has been the case for some time past. The Kaffir Circus has been brought into prominence in a fresh arena by the extraordinary interference of the police with the regular dealings in the Street, and the consequent arrest of members of the Stock Exchange, and their appearance before the metropolitan magistrates. There is no doubt that business has been considerably curtailed in this manner. It is to be hoped that some way out of the deadlock which the authorities have forced upon the Stock Exchange men will quickly be found, as Kaffirs can ill spare their after-hours' boomlets.

Some irregularity was evinced in South African gold shares on Saturday, movements on balance after many fluctuations tending in the downward direction, more particularly in the higher-priced shares that had been supported from the Continent. There was renewed animation in Chartered and Land shares, but here again the final prices were easier. West Australians were firm and prices were buoyant in the Miscellaneous section. On Monday there were lively fluctuations with receding values for the shares specially supported from Paris, where the settlement for the moment diverted attention. The buoyancy of Land shares, under the lead of Chartered, was resumed, and there was a sensational rise in City and Suburban, which caused a sympathetic improvement in a few specialities. West Australians were harder, while a big trade was done in Miscellaneous. Diamond shares showed a small reaction. On Tuesday the activity of Land shares eclipsed the movements in Rand enterprises, which were inclined to be in the downward direction. Jagers were strong, and there was a special spurt in Burma Rubys. An improved tone was reported in the Westralian market, and the demand for Broken Hill Proprietary, on the rise in silver, was the feature in the Miscellaneous section. Oceanas and Gold Fields led the way on Wednesday, heavy dealings in these shares tending to an extension of the interest in Land shares generally. Kaffir gold shares were inclined to dulness, the dealers making no attempt to prevent a moderate reaction, in preparation for the approaching settlement. It was noticed, moreover, that French and German buying orders were less persistent. West Australians were again active, and inclined to harden, Continental orders being traced into this market. There was a demand for the lower-priced Miscellaneous shares, with Charters Towers varieties in special demand.

On Thursday extensive realisations reduced the level in Kaffirs, but there was always plenty of support forthcoming to check anything like a break in prices, and declines, although numerous, were in no way important. Actual strength was developed in West Australians under the lead of Londonderry. Dealers were evidently inclined for a reaction in Miscellaneous, but buyers were on the look-out, and before the close there was a marked rally. Indians attracted more attention than of late. This morning the opening was dull, and uninspired operators were quite prepared for a cessation of activity over the account. The unexpected, however, happened, for about noon a strong demand sprang up for Chartered, Zambesias, and other Land shares, galvanising the entire Kaffir market into life. There was also a run on several out-of-the-way shares in the Miscellaneous market, such as Straits Development, whilst Rio Tintos were flat.

South African Shares.

There is very little in the way of sensational movement to record this week in South African gold shares. A large business has again been done, but the tendency was not so thoroughly "all one way," as during the previous week or two. On Wednesday there was a startling rise of nearly £4 in City and Suburban to 24½ on the official announcement that the nominal value of the shares would be altered to £4, so as to allow of a Bourse quotation in Paris. The price has since reacted to 23½, marking a gain of £3 on the week. George and May came into strong favour to-day, in sympathy with the movements in Zambesias—noted below—and rose over 10s., to 2 1/16, a gain of 1¾ on the week. It will be remembered that the latter company reconstructed the George and May, and holds a big block of shares. Moddersdipped to 13½ on Saturday, but are ¾ up on the week at 14¾. Village Main Reefs shot up on Wednesday, and mark a gain of 1/16 at 6¾. Knights are ¾, better at 6 1/16. Afrikander has lost ¼ on an indifferent crushing, and it is stated that there is water in the mine.

Block B has lost 3s. 6d. at 21s. 6d., the recent manipulation having been followed by realisations. Guy Fawkes Reef has risen from 11s. to 13s. Heriot is unchanged at 9½, in spite of a 25 per cent. dividend. Johannesburg Gold Fields have changed hands at 5s., and are expected to improve. Luipaard's Vlei had a sudden spurt to-day to 21s., and the prophets predict higher prices here. Shebas are firm at 30s., a gain of 1s. 6d. on the week. Sutherlands are where they started at 25s., after touching 28s. in the middle of the week. Transvaal Gold have lost ¼ at 4 1/16. Other changes are unimportant, and can almost be dismissed without comment. Reactions have been succeeded by recoveries, and changes either way scarcely ever exceed ½, a circumstance which speaks volumes for the intrinsic strength of the market.

As already indicated, Land shares have absorbed the lion's share of speculative attention this week. The dulness which followed the annual meeting of the Chartered Company in the middle of January prompted several of the leading dealers to anticipate a gradual decline in these shares, and they accordingly arranged their books with such an event in view, not hesitating to remain short of large blocks of shares. On Monday several of these operators for the fall took alarm at the growing demand for Chartered, with the result that the price rushed up from 47s. 3d.—at which it closed on Saturday—to 50s. A report at the same time gained credence that, as the shares were likely to be listed on the Coulisse, French operators were taking them in hand. On Tuesday a buying order for 20,000 shares was said to have been received from Paris, and the price went straight away to 54s. 9d. buyers closing at 54s. In the earlier dealings on Wednesday there was a further spurt to 55s. 6d., but at this figure realisations on a heavy scale ensued, and at the close the price was little better than 52s. 6d. To-day the upward movement was resumed, the price jumping from 54s. to 56s. in a few minutes. Whispers of a big subsidiary flotation accompanied the rise. The latest price, 56s. 6d., marks a gain of 7/16 on the week. Oceana started at 2½ on Monday, and after a steady improvement to 2⅝ on Tuesday, became buoyant on Wednesday, in spite of the set-back in Chartered. Dealings in the Street that evening ranged up to 8 1/16, whilst on Thursday the demand continued, and 8⅛ was the final quotation. To-night the price is 8 1/16. The activity is attributed to the contemplated flotation of another subsidiary company. Silatis, which have been for some time under a cloud, have spurted from 9s. 6d. to 14s. Bechuanaland, quoted at 34s. a week ago, shot up to 41s. on Tuesday, thought this figure brought in plenty of sellers. A dip to 38s. 6d. on Thursday, was succeeded by a fresh spurt to 40s. to-day, and in the Street the price is even better. Consolidated Gold Fields were one of the leading features on Wednesday, gaining fully ½, at 8½. This strength was accompanied by rumours of an immediate 50 per cent. dividend, the story going that profits in hand would admit of a cent. per cent. distribution. Frank Johnsons have been picked up, and score a gain of 2s. 6d. on the week at 20s. 6d. Alexandra Estates, quoted at 11s. a week ago, dipped to 6s. 6d. on Wednesday. Gwelo, on the same day, was dealt in at 12s. 9d. To-day there was a sharp break to 8s. 6d. There have been plenty of dealings in Klerksdorps, starting at 16s. 6d., but the price is finally 3s. down, at 13s. 6d. Johannesburg Investment, standing at 3⅛ on Saturday, rose to 3½ on Wednesday, but a reaction then set in sympathy with declines in Primroses, Buffels, and other shares in which the company is principally interested. Rumours have been in circulation that the operations of this company during the current year have yielded a profit equal to the entire £650,000 capital. Zambesias supplied one of the excitements to-day, rising suddenly to 4⅛. A week ago the shares stood at 3⅛. Johannesburg Water is about a shilling lower at 29s., Mozambique 1s. 6d. better at 26s., and Pardy's 1/16 down at 2⅞. Pardy's Range, the fourth subsidiary company of this syndicate, is the latest introduction into the market at a slight premium.

The Diamond share market had its only feature in the announcement of a dividend of £1 per share on Jagers, which took the price up ⅛ to 22⅛ on Tuesday. There has since been a relapse to 21⅛, which makes a fall of ¼ on the week. De Beers had a slump on Saturday from 21¼ to 20⅞, and there has been no recovery, the price at the close being 20 1/16.

Miscellaneous Shares.

A decidedly better tone has been evident in West Australians. Explorations were in demand in the earlier part of the week, and advanced from 2 to 2½. Kinsella have moved up about 5s. to 1 1/16, on rumours of a strike of 10 ounce ore. Associated are a shade over par, as compared with ⅜ discount. Blackett's are 2s. 6d. better at 10s., and Great Boulders 1s. 6d. up at 14s. 6d. A gain of ½ is shown in Lady Mary at 1⅝, but White Feather are the turn easier. Gold Estates improved on the over-subscription of the subsidiary Trenton Company. On Wednesday the buying of Mainland Consols and Golden Crowns for the Continent was a feature, the price of each advancing to ¼ premium. Paris seems to have taken kindly to Londonderrys on the strength of the exhibition of gold, which, as we stated last week, has been on view in the Place de l'Opera. It is asserted that these shares will be introduced upon the Bourse immediately, which cannot fail to have a stimulating effect upon the market here. Coolgardie (Sherlaw's) after being better in the middle of the week have eased off to 15s. 6d. Dealings have commenced in the shares of the subsidiary Sherlaw's Gold, the last price being 10s. 9d.

Some good business has been done in the shares of the Charters Towers group. New Queens announced an output of 495 ounces from 255 tons, but the shares are slightly easier on the week. Mill's Day Dawn United crushed 1589 tons during the past fortnight for 2225 ounces of gold. The shares are slightly harder, and Brilliants have been in demand on receipt of a cablegram announcing that the reef in the lowest part of the underlie shaft is 7 feet thick, and of good stone. The shares changed hands at 20s. on Thursday. Carringtons have risen 1s. to 9s., but Day Dawn Blocks are the turn easier at 11s.

The reassuring report which we publish in another column caused a demand for Broken Hill Proprietary on Saturday, and a rise in silver on Monday took the price up to 40s. On Tuesday there was a further spurt to 41s., and British ran up to 7s. 6d. on the report that the property is to be absorbed by the Proprietary. These prices, however, were not maintained, 5s. 6d. being the best of British, and 38s. 9d. of Props. to-day. The Kapanga group has been depressed, the market having apparently been manipulated for the advent of an allied venture. Waihis have been firm, without much fluctuation, but the demand for Wentworths has continued, the Ordinary touching 17s. 6d. and the Priority 26s. 6d. on Wednesday last. Indians have been very quiet, and are practically without change, except in the case of Champion Reef, which rose 7/16 to 4½, but relapsed to-day to 4¼. Queen's Birthday Preference are 2s. up on the week at 12s. 6d. A demand for Rio Tintos took them up ⅜ to 13 1/16, but this was all lost to-day, the last price being 12⅛. Masons are unchanged at 1¾. A sensational movement was engineered in Burma Rubys on Monday and Tuesday, carrying the price from 18s. 6d. to 30s. To-day, however, the quotation is back at 24s. Straits Development came into sudden notoriety this morning, jumping up 14s. or so to 1½. This company is a reconstruction of the Pahang Exploration, and its shares were at rubbish prices but a few weeks back.

STOCK EXCHANGE SETTLING DAYS.

Settling Days on the Stock Exchange are as follow:—

CONSOLS, Wednesday, April 3, 1895.

STOCKS AND SHARES.

Ticket Days.	MARCH.	Account Days.
Wednesday, Mar. 27		Thursday, Mar. 28
	APRIL.	
Tuesday, April 9		Wednesday, April 10
Thursday, April 25		Friday, April 26

Contango Days for South African Market are:—

Monday, March 25		Saturday, April 6

The Bank of Africa.

The directors in their report state that after providing for bad and doubtful debts the net profits amounted to £21,573, this, in conjunction with £6,988 16s. 1d. balance from June 30, 1894, makes a total of £28,561 16s. 10d. It is proposed to apply this sum as follows:—Dividend of 6s. 3d. per share (being at the rate of 10 per cent. per annum), free of income-tax, £12,500; bonus of 1s. 3d. per share (being 1 per cent. for the half-year) free of income-tax, £2,500; transfer to reserve fund, £7,500; balance to next account, £6,061 16s. 10d. The transfer of £7,500 to the reserve fund raises it to the substantial figure of £142,500. The distribution at the rate of 12 per cent. per annum (including the bonus) is the highest since 1889. A branch of the bank has been opened at Beira, East Africa. The 27th ordinary general meeting will be held at Cannon-street Hotel on Wednesday, 3rd April, at 1 p.m. The transfer books of the company will be closed from 26th March to 4th April, both days inclusive.

— The coupons due 1st April next on the 5 per cent. debenture bonds of the Rosario Company (Limited), together with the bonds drawn on the 5th inst., will be paid on and after Monday, 1st April next, at the offices of the company, Broad-street House, E.C., or in Bremen, at Messrs. St. Lurman and John, and the Deutsche National Bank

ANSWERS TO CORRESPONDENTS.

Correspondents will please take note that all communications will in future be answered in this column and not through the medium of the post. All questions and replies should be accompanied by the name and address of the writer.

REPLIES.

VERITUTIS.—The West Australian Exploration and Finance Corporation has recently successfully floated the Mainland Consols and the Golden Crown. We should consider the shares worth holding. The Consolidated Gold Mines of Western Australia are also a good holding. Mr. A. F. Calvert is managing director. We should feel inclined to take a small profit on Mallina shares, which have a limited market in London. Matabeleland Adventurers ordinary shares are worth holding, as the company has made a successful flotation, and is likely to do other good business.

SAVERNAKE.—There is not much activity at the moment in Indian mines. We should feel inclined to divide the investment, rather than have all our eggs in one basket. We hear good accounts of George Goch, though after the enormous rise that has taken place in the Kaffir Circus, it might be worth while to wait for a reaction before buying. Rand Rhodesia Exploration is barely three months old, and the shares stand at a premium of 120 per cent. This price would appear to discount their immediate prospects. Transvaal Lands, Silati, and New Belgium can hardly be regarded otherwise than as gambling counters. Nigel Extension is a fresh introduction this month. No prospectus was issued, and we cannot accept the responsibility of advising a purchase at 30 per cent. premium.

HESPERUS.—The capital of the Randfontein is £2,000,000, and, at the present market price, the future would appear to be fully discounted. At the same time, if the boom is resumed, these shares will probably go higher. We expect to see higher prices eventually for East Rand and Roodepoort Deep. Oceanas have had a big jump this week. There can be no harm in taking a profit. Silatis have also risen so perceptibly that we should wait for a reaction before buying.

ASTRAKAN.—Brilliants have had a good rise on the week, but must still be regarded as cheap. The latest cablegram from Charters Towers states that the reef in the lowest part of the underlie shaft is 7 feet thick, of good stone. The recent depression has been due to forced sales upon a limited market. We think the shares well worth holding for an investment. The three last dividends were at the rate of 4d. each, with 3d. bonus at the end of December.

H. J. C.—The shares of the first subsidiary company of the Coolgardie Gold Syndicate, known as Sherlaw's Gold Mine, have all been taken up privately. They are 10s. shares, and we believe that they may be bought in the market at a small premium. The reports upon the property, which is situate about 1½ mile south of Coolgardie, in a direct line of country with the Londonderry, encourage the suggestion that the shares are likely to advance in price.

COLONIST.—We hear good accounts of Day Dawn Block, though it may be a case of waiting some little while before the marked advance in the shares which is predicted, comes off. Victory (Charters Towers) will eventually repay a little patience. The mine has a big record in the past, and at any time the returns might improve enormously.

J.C.—We have no faith in the Afrikander Mine, which has been puffed for the last two or three years. The February crushing was 191 ounces, from 700 tons milled, and 259 ounces were obtained by cyanide from 1000 tons of tailings. There is nothing in these figures to justify higher prices.

NOVICE.—Sam's Wealth of Nations is one of the "no-prospectus" group, which the riggers have not yet taken in hand. If you are looking for a genuine investment, you had better leave it alone.

COUNTRY INVESTOR.—We consider that you will be quite justified in putting a few hundreds into the Five and-a-Half per Cent. Debenture Bonds of the South African Gold Trust. The total issue is £250,000, having a floating first charge upon all the assets of the company, except the uncalled capital. As additional security, stocks held by the company of the market value of half a-million have been transferred into the names of trustees for the benefit of the debenture-holders.

X. Y. Z.—The Seven per Cent. Mortgage Debentures of the Sheba Gold Mining Company are a very fair holding. North Shebas may be put up further, but we have no confidence in the value of the property. The same remark applies to Sheba Queen.

G. R. (Tamworth).—Except on rare occasions there is no money to be made by buying options in mines from outside dealers. Let us advise you not to buy any more shares than you can afford to pay for. Speculation on margin generally involves heavy loss in the long run.

A. M. S.—British Broken Hills had a sudden jump in the middle of the week, but the best price was not maintained. The shares are worth keeping at the present price. We expect to see Hyderabad-Deccan considerably better when the splitting of the shares has been completed, and progress is made with the flotation of the subsidiary companies.

BANK CLERK.—Jackson Gold Fields are a reconstruction of the old Amador. We should consider them little better than rubbish. Kinsellas are worth holding, and we hear good accounts of the prospects of Great Boulders.

CRONY.—We do not fancy any of your selections specially. If the boom is resumed one is as likely as another to share in it. The majority have already had good rises.

NEW ISSUES.

ROYAL SOVEREIGN GOLD MINING COMPANY (LIMITED).

The capital of this company is £60,000, in 60,000 shares of £1 each. Priority of allotment will be given to shareholders in the Lewis Mining Investment Trust (Limited). "This company has been formed," says the prospectus, "for the purpose of acquiring and working two gold mining leases, granted by Government on the usual terms, Nos. 1481 and 1482, consisting of 12 acres each, and known as the Royal Sovereign Gold Mine, situated in the '25 mile' district of the Coolgardie gold fields, 25 miles north of Coolgardie, on what is known as 'the Lone Hand Line of reef.' The property has been inspected and reported upon by:—N. W. Harper, mining manager of Fraser's Gold Mining Company, Southern Cross, W.A.; Wm. Oats, mining manager, South Frasers' Gold Mining Company, Southern Cross, W.A.; Richard Crossland, mining manager, Lone Hand Gold Mining Company, 25 mile, W.A.; and Wm. Adams, jun., M.A.I.M.E., of Coolgardie, late manager of the Junction Mine, at Broken Hill, N.S.W."

Mr. Harper, in his report, states that "two distinct parallel reefs traverse the property the whole distance; that near the southern boundary a shaft has been sunk 40 feet, producing rich stone, showing gold freely; that stone taken from this reef gave results equal to more than 2 ounces per ton; that an abundant supply of water should be met with at a comparatively shallow depth; and that there is ample timber for all mining purposes." Mr. Oats states that "on lease 1481 a costeen has been opened across reef 18 feet, and from 4 to 15 feet deep, showing gold all through, the stone assaying nearly 2 ounces to the ton. Twenty feet east of the Big reef a shaft 40 feet has been sunk, reef 2 feet thick, showing gold over 10 ounces to the ton."

The directors ask us to call attention to the fact that they have fixed the consideration for the sale and other obligations undertaken by them at £40,000, payable as to £14,000 in cash, £20,000 in fully paid shares, and the balance in cash or fully paid shares, or partly in cash or in fully paid shares, at their option, thus preventing the possibility of a large batch of shares being placed upon the market, with the effect of depreciating the property. They also lay stress on the large amount of working capital, in proportion to the capital of the company.

CONSOLIDATED MURCHISON GOLD FIELDS (LIMITED).

The capital of this company is £250,000, in 250,000 shares of £1 each. According to the prospectus, "it is formed to acquire and work an important group of gold mines, situate on the Murchison Gold Field, in Western Australia. The property to be acquired comprises six mines, held under the usual mining leases of Western Australia, and known as the 'Day Dawn' (No. 69), 'Day Dawn West' (No. 136), 'Day Dawn North' (No. 70), 'Rubicon' (No. 329), 'Rubicon North' (No. 281), and 'Strathmore' (No. 291), the whole covering an area of about 91 acres, upon which a large amount of development work has been done, and active operations are being carried on at present with a 20-stamp battery and full plant."

In a cable report which has been obtained by Messrs. Millar and Horne, on behalf of the West Australian Day Dawn Mining Association, Limited, from Messrs. Bewick, Moreing, and Co., whose representative, Mr. W. A. Mercer, examined the property, is the following general statement:—"The vast size of the reefs and uniform value assure a steady-paying concern, if sufficient plant be provided for large and continuous crushing. The property promises to be a good staying concern, and can be thoroughly recommended." The latest crushing is cabled as follows:—"Day Dawn, 500 tons; 384 ounces; plates, 280 additional.

PARDY'S RANGE (LIMITED).

The fourth subsidiary company of Pardy's Mozambique Syndicate, Limited, the capital of which has been subscribed by the members of the syndicate and their friends, is Pardy's Range (Limited), registered with a capital of £120,000 in 240,000 shares of 10s. each. The three elder "babies" of the same parent are the Guy Fawkes Reef (Limited), the 10s. shares of which are quoted at 13s. to 14s.; the Massi Kessi Reefs (Limited), having 10s. shares quoted at 10s. 6d. to 11s. 6d.; and the Ingamasonga Reefs (Limited), the shares of which are hardly yet introduced upon the market. The parent syndicate gives forcible evidence of its confidence in the prospects of Pardy's Range by accepting the purchase price, £86,000, entirely in fully-paid shares, with the exception of the odd £6,000 payable in cash. The property thus acquired consists of 23 claims, each 100 metres square, on the Mazi River, near Fort Massi Kessi, in Manica, adjoining the claims held by the Guy Fawkes, the Massi Kessi, and the Ingamasonga Reefs. The same formation is distinctly traced through every one of these claims, and Mr. Pardy reports that he has no doubt that the four reefs already found in the Penhalanga Range will all be found upon this property. Messrs. Johnson, Matthey, and Co. (Limited), assayers and melters to the Bank of England, have assayed average samples taken from the reefs running through this and the adjoining properties, certifying to a produce of gold equal to 1 ounce 7 dwts. 12 grains per ton of 2240 lbs. Mr. Claudet, assayer to the Bank, has also made three assays, one of which gave 3 ounces 18 dwts. 12 grains to the ton.

The new company thus starts with prospects of success. The £20,000 fixed as the sum desirable for machinery, development, and contingent expenses, has been provided; the directors are to receive the moderate remuneration of £50 each, and the parent syndicate is to receive 15 per cent. of the profits as management remuneration, the officers of the two undertakings being identical. Dealings in the shares have already commenced upon the Stock Exchange.

SHERLAW'S GOLD MINE (LIMITED).

The attention which has been drawn during the past few weeks to the Coolgardie Gold Syndicate (Sherlaw's) (Limited) the 10s. shares of which, with 5s. paid, have been up to 19s. 6d., and are still standing at 17s., invests with reflected interest the syndicate's first "baby." Sherlaw's Gold Mine (Limited) has been formed with the moderate capital of £50,000, in 100,000 shares of 10s. each to acquire and work Mining Block 190, having an area of 12 acres or thereabouts, situate about a mile and a-half south of Coolgardie, in a direct line of country with the celebrated Londonderry Mine. The property is held under Crown lease, and has been secured in such a way as to include 17 chains, or about 1122 feet along the line of reef which outcrops the whole length. On the northern boundary the property adjoins the well-known Star of Coolgardie Mine, and hard by is the equally well-known Tyndall's, in which some of the best-known men in Australia are interested as shareholders. Messrs. Colin J. McCulloch and J. C. Jesson have reported most favourably upon the property, and beyond these is the testimony of Mr. Sherlaw that the reef is a true fissure, and runs the whole length of the lease. He states that he tested 170 tons of 3-ounce ore by bulk and ordinary amalgamation process, that the quartz is easy milling and free of refractory basis, that there is abundance of timber and firewood in close proximity, also a splendid site for dam and battery. He adds, very significantly—"This property I can recommend as a genuine spec to the investing public."

The directors have adopted Mr. Sherlaw's view that £10,000 should be the working capital. The syndicate has fixed the purchase price at £40,000, defraying all costs up to allotment. It is estimated that a 10-head battery, working 100 tons per week, will produce a net profit per annum of cent. per cent. on the company's capital. The 10s. shares, which have been introduced upon the market during the past few days, are in demand at 10s. 6d. to 11s.

New Chum Gold Mines.

The following is from a circular issued to the shareholders:—By direction of the board, I have the pleasure to inform you that the usual fortnightly cable from the company's mining manager (Mr. George Phillips), to hand on the 18th, evidences most satisfactory progress, as during the fortnight, the main engine shaft has been sunk a further 16 feet, making a total of 421 feet from surface and 21 feet from plat, and when the heavy flow of water (exceeding 120,000 gallons per 24 hours) and the hardness of the strata is considered, this is very good work. 29 feet further sinking will probably see the shaft through the west slate boulder of the formation, and give ample height of backs to provide an immense tonnage for crushing purposes.

THE METAL MARKETS.

LONDON METAL MARKET.

THE METAL MARKET, LONDON, MARCH 22.

Copper.

THE large improvement in the statistics for the first fortnight coupled with the strong silver market, promised a stimulus to the G.M.B. market during the early part of this week, and prices rose several shillings per ton, but a downward reaction in silver, the lack of speculation, the fact (alluded to in last week's report) of the liquidation of Baron Hirsch's holdings bringing so many more warrants into the market, and finally the renewed pressure of cheap offers from America combined to neutralise the improvement recorded. On Monday about 500 tons G.M.B. changed hands, £39 being paid for s.c. and £39 7s. 6d. for three months. Tuesday's turnover was about 550 tons, and the value of spot improved to £39 3s. 9d., and of three months to £39 11s. 3d. On Wednesday 325 tons were done at £39 5s. to £39 6s. 3d. s.c., and £39 12s. 6d. three months. Yesterday s.c. was treated at £39 5s., and £39 2s. 6d., whilst three months declined to £39 10s. The business amounted to about 350 tons To-day's transactions totalled 550 tons, and values underwent further depreciation, spot touching £38 17s. 6d., and three months £39 3s. 9d. The close is dull at £38 16s. 3d. to £39 18s. 9d. s.c., and £39 2s. 6d. to £39 3s. 9d. three months. Consumption is quiet, but prices of English refined copper are steady, and practically unchanged.

Tin.

Has been a brisk market this week, and the strong silver market caused a rapid rise in values. On Monday with a turnover of 750 tons, we had a rise in spot Straits from £61 7s. 6d. to £62 2s. 6d., three months realising up to £62 10s. On Tuesday spot changed hands at £62 10s., and three months down to £62 12s. 6d. The transactions amounted to 600 tons. Wednesday's business totalled 250 tons, and brought a recovery to £62 10s. s.c., and £63 three months. On Thursday, however, silver began to go back, and tin followed suit, 62s. 5d. s.c. being accepted on Thursday and £62 2s. 6d. s.c. on Friday. The close is firmer, however, at £62 7s. 6d. to £62 10s. s.c., and £62 12s. 6d. to £62 15s. three months. Australian tin is now quoted at a premium of about 7s. 6d. In the Dutch market the morning quotations have been as follows:—Monday, 37½ fl. s.c. and 37½ fl. three months; Tuesday, 37½ fl. and 37⅜ fl., Wednesday, 38 fl. and 38¼ fl.; Thursday, 37⅜ fl. and 37½ fl.; Friday 37⅞ fl. and 38⅛ fl. s.c. and three months respectively. Banca closes at 38¼ fl.

Pig Iron.

The Scotch shipments last week were 5219 tons, or 15 tons more than in the corresponding week of 1894. The Glasgow market opened steady, and improved from 41s. 8½d. s.c. Scotch, to 41s. 11½d., and closes at 41s. 8d., with hematite at 42s. 5d., and Cleveland at 34s. 4d.

Lead

has grown still firmer, and sellers are somewhat reserved. The values at the close are £9 17s. 6d. to £10 soft foreign, and £10 to £10 2s. 6d. English.

Spelter

improved in price, though consumption continues to flag. At the close the tone is weaker again, and the final values are £13 15s. ordinaries and £14 specials.

Antimony

is quiet at £31 to £31 10s.

Quicksilver

likewise quiet, with prices steady at £6 10s. firsts and £6 9s. 6d. seconds.

The following are to-night's (March 22) prices of metals:—

	£ s. d.	£ s. d.
Copper.		
Tough cake and ingot	41 15 0	42 5 0
Best selected	42 10 0	43 0 0
Sheets and sheathing	43 0 0	50 0 0
Flat bottoms	52 0 0	53 0 0
Chili bars	spot, & 3 months respectively 38 18 3	39 2 6
Good merchantable,		
Copper tubes, seamless	—	0 0 6¾
Alloys.		
BRASS: Wire	—	0 0 6
,, Tubes (solid drawn)	—	0 0 5¾
,, Sheets	—	0 0 5¾
PHOSPHOR BRONZE: Alloys II.	—	78 0 0
,, ,, III. or	Cog Wheel Brand —	81 0 0
,, ,, VII.	—	83 0 0
,, ,, XI.	—	78 0 0
,, ,, Vulcan brand A1	—	72 0 0
DURO METAL	—	73 0 0
BULL'S METAL	—	65 0 0
Ferrobronze (Vivian's).		
Ingots ...per lb.	0 0 5¼	—
Ordinary sheets, plates, bolts and bars	0 0 6¼	—
Screw bolts and nuts	0 0 7¼	—
Pump rods, plain	0 0 8¼	—
,, finished	0 0 9¼	—
DELTA METAL: No. 4 (per ton)	—	—
,, Sheets and plates (per lb.)	—	—
,, Bars, round, square, flat (per lb.)	—	—
,, ,, hexagon (per lb.)	—	—
Tin.		
English, ingots, f.o.b.	65 15 0	66 5 0
,, bars	66 15 0	67 5 0
,, refined	67 15 0	68 5 0
Straits, spot and 3 months respectively	61 7 6	62 12 6
Australian spot, and three months respectively	62 15 0	63 0 0
Banca ,, (in Holland)	64 0 0	64 2 6
TIN PLATES: Charcoal, best quality per box	0 12 0	0 14 0
,, ,, ordinary	0 10 0	0 11 0
,, Coke, best quality	0 9 6	0 9 9
,, ,, ordinary	0 9 1½	0 9 3

These prices of tinplates are f.o.b. at Swansea: at Liverpool 6d. per box more.

Iron.		
Pig, G.M.B., f.o.b., Clyde, spot	—	2 1 8
,, Scotch pig, No. 1 Gartsherrie	—	2 10 0
,, ,, Coltness	—	2 12 0
,, ,, Clyde	—	2 8 6
,, ,, Govan	—	2 5 0
Bars, Welsh, f.o.b. Wales	—	4 17 6
Plates ,, ,,	—	5 12 6
Bars, Staffordshire, at works	—	4 17 6
Sheets ,, ,,	—	6 5 0
Plates ,, ,,	—	5 7 6
Hoops ,, ,,	—	5 12 6
Ship plates, Middlesborough	—	4 12 6
STEEL: English spring	—	10 0 0
,, ,, cast	—	42 0 0
,, Rails at works, according to section	3 10 0	4 15 0
Lead.		
Spanish or soft foreign	9 17 6	10 0 0
English pig, common	10 0 0	10 2 6
,, L.B.	—	10 10 0
,, sheet	—	11 0 0
,, bar lead	—	11 0 0
,, pipe	—	11 10 0
,, red	—	12 5 0
,, white	—	16 5 0
,, patent shot	—	14 10 0
Spelter.		
Silesian ordinary brands	13 12 6	13 15 0
,, special brands	13 17 6	14 0 0
English Swansea	14 7 6	14 10 0
Sheet Zinc	17 2 6	17 7 6
Antimony.		
Antimony	31 0 0	31 10 0
Quicksilver.		
Flasks, 75 lbs. warrants	6 9 6	6 10 0
Manganese.	per unit.	
Ore, c.i.f., U.K. ports		
1st quality, 50 per cent. and upwards	0 0 10½	0 0 11
2nd ,, 47 per cent. to 50 per cent.	0 0 9	0 0 10
3rd ,, 40 ,, 47 per cent.	0 0 8	0 0 9
Aluminium.		Per lb.
98-99½ per cent. (guaranteed 98 per cent. min.) in ingots (1 cwt. lots)		0 1 7
do do (1 ton lots)		0 1 6
Nickel.		
98-99 per cent. guarantee	0 1 3	0 1 4

"THE MINING JOURNAL" SHARE LIST.

BRITISH MINES.

Name	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
			£ s.		£ s. d.			
Blue Hills ....CT	2/6 5/-	2/6	*	2/- May,'81	5 15 6	5,353	Cornwall	Camborne.
Botallack .... T	—	—	*	—	51 4 6	1,880	Cornwall	St. Just.
Carn Brea ....T	15/- 20/-	2/6	*	2/6 Dec.,'93	22 8 5	6,000	Cornwall	Carn Brea.
Cook's Kitchen ..T	5/- 15/-	10/-	*	—	35 15 10	4,900	Cornwall	Camborne.
Devon Gawton CA	par ¼ pm.	p.¼p.m	1 0	—	0 12 6	25,000	Near Tavistock	8, Finsbury circus.
Devon Gt Cons. CA	20 25	1½	5 0	3/- Nov. '94	2 0 0	10,240	Devon	8, Finsbury circus.
Dolcoath ....T	33½ 34¼	31½	*	12/6 Apr. '94	9 12 6	4,700	Cornwall	Camborne.
Drakewalls CTM	—	—	0 5	—	0 2 0	61,856	Cornwall	Dashwood House.
East Halkyn	15/- 17/6	—	1 0	—	0 12 6	12,000	Flintshire	67, Lord St., Liverpl.
East Pool ....AT	4½ 5	4½	*	1/6 Sept, '94	0 9 9	6,400	Cornwall	Illogan.
Gawton ....CA	—	—	2 10	—	2 7 3	12,000	Devon	20, Great St. Helens.
Great Laxey L	1½ 2	1½	4 0	5/- Apr.,'92	4 0 0	15,000	Isle of Man	Douglas, Isle of Man.
Green Hurth ...L	1/6	1/6	1 0	-/6 June '89	0 19 0	32,000	Cumberland	Newcastle.
Halkyn L	8 10	—	1 0	—	1 0 0	10,000	Flintshire	Chester.
Do. Dis. Mn. Drain	8½ 10½	—	10 0	4/- Mar. '95	10 0 0	10,000	Flintshire	CornEx.Cmb.Chestr.
	—	—	1 0	6 p c Aug. 94	1 0 0	3,000	Flintshire	67, Lord St., Liverpl.
Isle of Man L	—	—	5 0	1/6 Dec. 94	5 0 0	11,000	Isle of Man	Chester.
Killifreth ....T	10/6 12/6	1/-	*	1/6 Nov.,'94	5 11 6	6,000	Cornwall	Truro.
Leadhills L	15/- 20/-	15/-	6 0	3/- Sep. '92	6 0 0	20,000	Lanarkshire	30, Finsbury-circus.
Llanarmon	par	—	1 0	—	1 0 0	21,993	Denbigh	8. Werburgh Chmbrs
Llanarmon	par	—	1 0	—	0 15 0	3,790	Flintshire	Chester.
Levant ....CT	4¾ 5	—	*	4/- Nov.,'94	11 9 6	2,500	Cornwall	Penzance.
Lovell ....T	—	—	*	1/3 Nov.,'91	1 16 7	7,165	Wendron	3, Gt. Queen-st.,S.W.
Minera L	—	—	5 0	5/6 Mar. '90	5 0 0	9,000	Denbighshire.	Minera, N. Wales.
Nenthd&Tudie. LZ	3/6	3/6	1 0	6% Feb., '91	0 18 0	48,8[illegible]5	Northumberld	Newcastle-on-Tyne
NewCooksKitn. TC	—	—	*	—	10 18 3	4,900	Cornwall	Camborne.
New Minera	—	—	1 0	1/- Oct., '92	1 0 0	30,000	North Wales	6 Queen-street-place.
North Hendre	7½	—	2 10	8 p c year 92	2 10 0	11,854	Flintshire	11, Nwgt. st., Chstr.
Parc ....LZ	—	—	1 0	—	1 0 0	5,000	Llanrwst	Billiter sq. buildings
Phœnix United TC	1/6 2/-	1/6	*	1/- Mar. '90	7 4 6	10,665	Cornwall	Liskeard.
Polberro ....T	10/ 15/	12/6	*	—	3 7 9	18,000	Cornwall	37, Walbrook.
Rhosemor L	par	—	1 0	10 p c Sept. 91	1 0 0	1,010	Flintshire	CornEx.Cmb.Chestr.
Rhosemor L	par	—	1 0	—	0 19 0	18,810	Flintshire	CornEx.Cmb.Chestr.
So. Condurrow TC	2/6 7/6	2/6	*	3/6 Apr. '93	7 17 6	6,123	Cornwall	20, Great St Helens
South Crofty TA	2/6 7/6	2/6	*	—	17 7 6	6,120	Cornwall	Pool, Cornwall.
S. Frances Untd. T	2/6 7/6	2/6	*	—	7 7 6	6,000	Cornwall	Redruth.
South Halkyn	par	—	1 0	—	1 0 0	10,000	Flintshire	8. Werburgh Chmbrs
South Halkyn	par	—	1 0	—	0 7 0	30,003	Flintshire	8. Werburgh Chmbrs
Talacre	par	—	1 0	—	0 18 0	20,008	Flintshire	81, Forgate st., Chstr
Tincroft ....T	4 4½	4	*	2/- Aug. '94	15 7 6	6,000	Cornwall	Carn Brea.
Weardale L	8/9	8/9	4 0	1/3 Oct. '90	1 10 0	60,000	Durham	3, Lombard-court.
West Frances ...T	2/6 7/6	2/6	—	2/6 May,'89	16 4 7	6,144	Cornwall	Camborne.
West Kitty ....T	4¾ 5¼	4¾	*	2/- Dec, '94	1 2 0	6,000	Cornwall	37, Walbrook.
Wheal Agar ..TA	2/6 7/6	2/6	*	2/6 Aug. '88	23 15 2	6,000	Cornwall	Redruth.
Wheal Basset ...TC	5/- 10/-	5/-	*	10/- Apr.'88	12 3 0	6,144	Cornwall	Redruth.
Wheal Friendly..T	-/6 1/-	-/6	*	—	0 12 9	10,000	Cornwall	110, Cannon-st., E.C.
Wheal Grenville T	9 10	9	*	2/6 Nov. '94	18 2 0	6,000	Cornwall	7, Union-court, E.C.
Wheal Kitty ....T	1/- 3/-	1/-	*	3/- Mar. '88	4 5 6	8,590	Cornwall	Truro.
Wheal Metal &F. T	1/- 1/6	1/-	*	—	0 13 9	10,784	Cornwall	14, Broad-street Av.

AUSTRALIAN AND NEW ZEALAND MINES.

Name	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Abbotts ....G	0/- 15/-	10/-	1 0	—	0 17 6	100,000	Murchison	17, Old Broad st.
Achilles Gld Fld	3/3 3/6	2/-	1 0	—	1 0 0	80,307	New Zealand	3, Church Pas., E.C.
Aladdins Lamp G	18/9 21/3 xd	18/9	1 0	1/- Mar. '95	1 0 0	100,000	N S Wales	4-6, Throg. Avenue.
Assoc. Gold Mines	par ¼ pm	5/16	1 0	—	0 10 0	375,000	Coolgardie	Broad Street Avenue
Austin ....G	22/6 25/	22/6	1 0	—	1 0 0	50,000	W. Australia	23, College hill, EC
Australasian ....G	4/6 5/	4/	1 0	-/6 Mar., '92	1 0 0	210,000	Queensland	6, Queen-st, place
Australian C	—	—	20 0	1/6 July '94	7 7 6	18,315	So. Australia	15. Old Jewry Chbrs
Aus. Bro. Hill Con.	2/ 2/6	1/	1 0	1/- June, '91	1 0 0	537,135	N. S. Wales	Dashwood House.
Baker's Creek ...G	17/6 22/6xd	17/6	1 0	1/- Feb. '94	0 17 6	100,000	N. S. Wales	Hillgrove, N.S.Wales
Bayley's Reward G	9/6 10/6	8/6	1 0	-/4 Dec. 94	1 0 0	480,000	W. Australia	F'sb'y. H. Bl'mf'ld St.
Big Blow ....G	14/6 15/6	14/6	1 0	—	0 15 0	100,000	W. Australia	Blomfield Ho., E.C.
Blackett's Claim G	8/9 11/3	6/3	1 0	—	1 0 0	60,000	W. Australia	14, Sherborne ln. E.C.
Blue Spur & G. G.	-/6 1/-	-/6	1 0	—	1 0 0	80,098	New Zealand	6, Gt. St. Helens'
Bonnie Dundee G	15/6 16/6	16/6	1 0	—	0 18 6	120,000	Queensland	3-5. Gracechurch-st
Brilliant ....G	17/ 18/ xd	17/	2 0	-/4 Feb. '95	2 0 0	250,000	Queensland	Charters Towers.
Brilliant Block ...G	1 13/16 1 15/16 xd	1 13/16	2 0	-/6 Apr. 95	2 0 0	250,000	Queensland	3, Gracechurch-st.
Brilliant, St. Geo.	1¼ 1⅜	1 5/16	0 10	6d. Mar. '95	0 6 3	72,000	Queensland	Charters Towers.
Brit. Brok. Hill S	5/ 6/	5/6	5 0	—	5 0 0	240,000	N. S. Wales	Dashwood Ho., E.C.
Broken Hill Prop.	1 13/16 2 1/16	1⅞	0 8	1/- Feb. '95	0 8 0	960,000	N. S. Wales	Dashwood Ho., E.C.
Cashman Bril.... G	¾ ⅞	¾	1 0	—	1 0 0	60,000	Coolgardie	14, Sherborne ln. E.C
Carrington ....G	8/9 9/3	8/3	12/6	—	0 12 6	100,007	Queensland	9, Tokenhouse Yard,
Con. G. M. of W. A.	par ⅛ pm	1/16 dis	1 0	—	0 12 6	90,000	W. Australia	14, Hill st., Edinboro'
Coolgardie ....G	-/6 -/9	-/6	0 2	—	0 0 6	40,000	Coolgardie	Winchester House.
Coolgardie(Shriws)	15/6 16/6	18/-	1 0	—	0 6 3	—	Coolgardie	Broad Street Avenue.
Craven's Cal. ... G	3/6 4/6	3/6	0 6	-/3 June 94	0 4 8	100,000	Queensland	30 1, S. Swithin's-le.
Crown Bayley's. G	1/16 ⅛ pm	1/16	1 0	—	0 10 0	80,000	Coolgardie	Bishopsgate Ho. E.C.
Croydon King B. G	3/0 5/-	3/-	0 5	—	0 5 0	60,000	N. Queensland	Leadenhall Big. E.C.
Cumbrland (New)G	4/6 5/-	4/3	1 0	2/6 Dec.'87	0 18 6	184,790	Queensland	Blomfield House E C
DayDawn B.&W. G	11/6 12/-	11/-	1 0	-/6 Mar. 93	1 0 0	498,400	Queensland	3-5, Gracechurch-st.
Day Dawn P. C. G	4/6 5/-	5/-	1 0	-/6 Apr. '92	1 0 0	490,000	Queensland	Winchester Ho.,E.C
Eaglehawk ....G	1/- 1/6	1/-	1 0	—	0 19 9	120,000	Victoria	31, Lombard-street.
Empress Coolge. G	¼ ⅛ dis.	¼	1 0	—	0 10 0	90,000	W Australia	2, Tokenhouse bldgs
Eng. & Aus. Cop. Cu	5/16	5/16	2 0	2% 1883	1 17 6	70,000	So. Australia	136, Palmerston-blds
Etheridge ....G	—	-1⅛	0 5	—	0 5 0	324,[illegible]90	Queensland	6-7, Queen-street-pl.
Frederick the Gt G	—	p.½pm.	1 0	—	1 0 0	125,000	Victoria	St. George's House.
Glenrock ....G	/9 1/3	1/	1 0	—	1 0 0	225,000	N. Zealand	3-5, Queen-st, E.C.
Golconda ....G	20/- 22/6	20/-	1 0	—	1 0 0	68,086	Murch'snW.A.	14, Sherborne ln., E.C
Gold Estates	1 5/16 1 9/16	1 5/16	1 0	—	0 10 0	60,000	W. Australia	42, Gresham House.
Great Boulder ...G	14/ 15/	12/6	1 0	—	1 0 0	119,380	W. Australia	3, Gracechurch st.
Great Coolgardie	⅝ 11/16	¾	1 0	—	0 15 0	80,000	Coolgardie	3 Budge Row.
Great Fingall Rfs.	2 2¼	2	1 0	—	1 0 0	175,000	Kurnalpi WA	Broad Street House.
Golden Gate ... G	1/3 1/9	1/3	0 10	—	0 10 0	150,000	Queensland	9, Tokenhouse Yard.
Hampton Lands..	3⅛ 3¼	3 1/16	1 0	10/- Nov. '94	1 0 0	64,075	W. Australia	1, Whittington Avne
Hampton Plains ..	1⅝ 1¾	1 9/16	1 0	—	0 4 0	350,000	W. Australia	29, S. Swithin's lane
Hannan's BrwnHil	1 7/16 1 9/16	1¼	1 0	—	1 0 0	65,000	Coolgardie	Broad Street House
Hauraki ....G	7/- 7/6	—	2/6	—	0 0 [illegible]	250,000	Coromand.,N.Z	Dashwood Ho.; E.C.
Kaboonga ....G	2/6 4/	3/6	0 10	—	0 9 9	500,000	Queensland	70 71, Bishopsgate st.
Kangarilla ....S	2/6 3/6	2/6	1 0	—	1 0 0	88,275	So. Australia	68, Coleman-street
Kapanga ....G	10/- 11/	11/	1 0	-/6 Jan. '91	0 19 6	250,000	N Zealand	9, New Broad-street
Kilkivan ....G	—	—	1 0	—	1 0 0	81,392	Queensland	4, Coleman-street.
Kinsella ....G	1 1⅛	17/6	1 0	—	1 0 0	80,000	Murch'snW.A.	33, Broad-st. Avenue
Kurnalpi ....G	11/ 12/	—	1 0	—		—	Coolgde, W. A.	Throgmorton House
Lady Loch	1 1⅛	par ⅛	1 0	—	0 10 0	70,000	Coolgardie	9, Tokenhouse Yard,
Lady Mary Amalg.	1⅛ 1⅜	1 3/16	1 0	—	1 0 0	46,000	Murchison	Blomfield House,
Lindsay	1/16 dis 1/16 pm.	1/16 dis	1 0	—	0 10 0	65,000	Coolgardie	Copthall House
Londonderry ....G	27/6 30/-	28/3	1 0	—	1 0 0	467,000	Coolgardie	3, Gracechurch-st,
L.& W. Aust. Expl.	2 1/16 2 5/16	1 15/16	1 0	20 p.c. Dec. '94	1 0 0	100,000	W. Australia	Broad Street Ho.
Mainland Cons. G	5/16 5/16	1/16	1 0	—	0 10 0	150,000	Murchison	4, Old Broad Street
Mawson's Rewrd. G	17/6 20/-	17/6	1 0	—	0 10 0	60,000	W. Australia	28 & 29 S Swithin's ln
Mills' Day Dawn G	1⅜ 1⅛	1 5/16	1 0	-/6 Mar. '95	0 15 6	300,000	Queensland	3, Gracechurch-st.
Mosman ....G	4/6 5/	4/6	1 0	—	1 0 0	53,235	N. S. Wales	16, St Helen's-place.
Mt. Leyshon ....G	—	—	1 0	-/6 Dec. '90	1 0 0	157,989	Queensland	7, Draper's-gardens.
Mountain Maid G	—	2/-	0 10	—	0 6 3	56,000	Queensland	Leadenhall Bldgs.
Mount Morgan G	2⅜ 2¾ xd	2⅜	1 0	-/6 Feb. 95	0 17 6	1,000,000	Queensland	50, Lime-street.
Mount Zeehan Sl.	-/6 1/-	-/6	1 0	—	1 0 0	193,257	Tasmania	Mansion Ho. Cham.
N. Australian G. F.	19/- 20/-	—	1 0	—	1 0 0	20,000		7, Union Court.
New Queen ....G	7/6 8/6	7/6	1 0	-/6 Apr., '94	0 19 6	158,915	Queensland	30, St. Swithin's-la.
Nicol Mines	1⅛ 1⅜	1⅛	1 0	—	1 0 0	15,000	Pilbarra, W.A.	151 Cannon St., E.C.
North Coolgardie.	2/9 3/3	2/9	0 5	—	0 4 0	85,000	Coolgardie	22[illegible], Winchester Ho.
N. Q'ld. Agency	39/6 40/6	33/-	1 0	2/6 Jan. '95	1 0 0	90,000	Queensland	1[illegible], New Broad Street
Port Phillip ....G	—	-/3	0 5	—	0 5 0	200,000	Victoria	57, Moorgate-st., E.C.
Queen's Bthdy Un.	9/6 10/6	9/6	1 0	—	0 12 6	75,000	Victoria	7-8, Gt. Winchester St.
Sam's With. of Nat.	5/3 5/9	—	1 0	—	0 18 0	200,000	W. Australia	33, Old Broad Street.
Scottish Australian	⅝ ⅞	⅝	1 0	14-5d. Nov. '94	1 0 0	200,000	N.S. Wales	Winchester Ho. E.C.
Victoria Associatn.	—	—	1 0	-/6 Mar. '95	1 0 0	144,000	Char. Towers	6, Crosby-square
Victory ....G	6/ 7/	6/-	0 5	-/3 Mar., '94	0 5 0	200,000	Queensland	32, Gresham-st., E.C
Waihi ....G	6⅛ 6⅜xd	6⅛	1 0	2/- Jan. '95	1 0 0	150,000	New Zealand	11, Abchurch-ln E.C
Waratah ....G	7/6 8/6	—	0 10	—	0 10 0	6,000	Croydon, N. Z.	48, Threadneedle st.
Wentworth Exten	7/ 7/6	-/6	0 5	—	0 5 0	178,828	N. S. Wales	19, S. Swithin's Lane
Wentworth Ord. G	17/ 18/	14/6	1 0	—	1 0 0	350,000	N. S. Wales	4-6, Throgmort. Av.
Went. Priority.. G	1⅛ 1 5/16	1 1/16	1 0	3/- Apr. '95	1 0 0	150,000	N. S. Wales	4 6, Throgmort. Av.
W. Argentine G	1/3 1/9	-/9	1 0	—	0 19 6	150,000	N. Zealand	3-5, Queen-street.
W. Aust. Concessn	1⅝ 1¾	1⅝	1 0	1/- Jan. '95	1 0 0	17,500	W. Australia	33, Old Broad st., EC
W. Aus. Exploring	⅛ ⅜pm	⅛	1 0	—	0 15 0	100,000	W. Australia	54, Old Broad st., EC
W. Australian G.F.	3⅛ 3⅜	3¼	1 0	2/6 Dec., 94	1 0 0	65,000	W. Australia	28 29, S. Swithin's-ln.
W. Aust. Mining	6/6 6/6	6/-	1 0	—	1 0 0	104,297	W. Australia	157, Winchester Ho.
W. Mallina ....G	2/6 3/-	2/-	0 5	—	0 3 0	80,000	W. Australia	Winchester House.
White Feather ...	2 1/16 2 5/16	2⅛	1 0	—	1 0 0	60,000	W. Australia	28 & 29 S.Swithin's ln.
Zeopan ....G	7/6 8/-	6/6	1 0	—	1 0 0	25,000	N.W. Australia	70 Bishopsgate-street
Zeehan Montana S	—	—	1 0	4d. Mar. 95	1 0 0	66,000	Tasmania	11, Queen Victoria st.
Zeehan Montana S	—	—	1 0	5d Aug., 94	0 12 6	12,600	Tasmania	11, Queen Victori st.

EUROPEAN MINES.

Name	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Alamillos L	10/- 15/-	10/-	2 0	-/6 April '95	2 0 0	35,000	Spain	6, Queen-street-place
Avala ....Q	0 ⅜	0	1 0	1/- May '93	1 0 0	150,047	Servia	4, Tokenho. B'dgs.
Consett Ore I	5⅜	5⅜	1 0	5/- July 94	1 0 0	65,20[illegible]	Spain	19, Grey-st., N'castle
English Cr. Speiter	⅜ ⅝	⅜	1 0	2⅜% Aug. '94	1 0 0	84,000	Lombardy	9, Queen-street-place
Fortuna L	17/6 22/6	17/6	2 0	1/- April '95	2 0 0	25,000	Spain	6, Queen-street-place
Libiola C	3⅛ 3⅜	3⅛	5 0	4/6 Mar. 95	5 0 0	50,400	Italy	Dashwood Ho., E.C.
Linares L	3⅞ 4⅛	3⅞	3 0	4/6 April '94	3 0 0	14,998	Spain	6, Queen-street-place
Mason & Barry ...C	1⅝ 1⅞	1⅝	5 0	2/- May. '94	5 0 0	185,172	Portugal	87, Cannon-street.
Oscar ....G	—	—	5 0	—	0 4 6	117,240	Norway	6A, Austin Friars.
Pestarena ....G	4/6 5/6	4/6	3 0	—	3 0 0	67,[illegible]09	Italy	6-7, Queen-street-pl.
Pontgibaud ....SL	—	—	20 0	11/6 Dec '94	20 0 0	14,000	Coueron, Fr.	6-7, Queen-street-pl.
Rio Tinto C	13¼ 13⅜	12 13/16	10 0	4/- Oct., '94	10 0 0	325,000	Spain	30, St. Swithin's-lane
Do (Mort. Bonds)	105 107	105	100 0	5% Jan., '95	100 0 0	£1892,740	Spain	30, St. Swithin's-lane
Do. (2nd do.)	103 105	103	100 0	5% Jan. '95	100 0 0	£1023,8[illegible]4	Spain	30, St. Swithin's-lane
Do. (3rd do.)	101 103	101	100 0	5 p.c. Jan., 95	100 0 0	£517,080	Spain	30, St. Swithin's lane
Ripanji ....SQ	9/- 11/-	8/-	1 0	—	0 19 0	95,000	Servia	120, Bishopsgt-st. Wn
Tharsis ....C Sul	4⅜ 4⅜	4⅜	2 0	12½% Mar. '94	2 0 0	625,000	Spain	Glasgow.
West Prus Pre.pref	—	—	10 0	8% Jan. 95	10 0 0	365	Germany	Walbrook Ho., E.C.
West Prussian Pre.	—	—	10 0	8% Jan. '95	10 0 0	5,450	Germany	Walbrook Ho., E.C.
West Prussian Or.	—	—	10 0	8% Jan. '95	10 0 0	14,050	Germany	Walbrook Ho., E.C.
Wohlfahrt L	—	—	1 0	3% Dec. '94	1 0 0	99,634	Prussia	17, Victoria-st., S.W.
Wohlfahrt	—	—	1 0	3% Dec. '94	0 10 0	9,090	Prussia	17, Victoria-st., S.W.

INDIAN AND ASIATIC MINES.

Name.	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Asia Minor Pref. Sl.	—	—	0 10	—	0 10 0	42,430	Asia Minor	2, Metal Ex. Bldgs.
Do. Ord. ...	—	—	1 0	—	0 9 0	51,584	Asia Minor	2, Metal Ex. Bldgs.
Balaghat Mysore G	2/9 3/0	3/0	1 0	—	0 19 0	160,000	India	6-7, Queen-street-pl.
Burma Ruby ....R	25/6 26/6	20/6	1 0	—	0 18 0	300,000	Burmah	Suffolk House, E C.
Champion Reef ...G	4 1/16 4 3/16	4/-	1 0	3/- Jan. '95	1 0 0	200,000	India	6-7, Queen-street-pl.
Colar Central ...G	-/6 1/-	-/6	1 0	—	1 0 0	200,000	India	Dashwood Ho., E.C.
Coromandel .... G	5/- 6/-	5/-	1 0	—	0 13 9	95,000	India	6-7, Queen-st.-place.
DevAla Moyar ...G	—	—	1 0	—	1 0 0	200,000	India	34, Nicholas-lane.
Gemming & Mining	—	—	2 0	—	1 7 6	19,594	Ceylon	183, Gresham House.
GoldFldsMysore G	17/- 19/-	17/-	1 0	1/- July '92	1 0 0	220,000	India	6-7, Queen-street pl.
Gold Flds Siam G	—	—	1 0	—	1 0 0	150,000	Siam	19, St. Swithin's-lane.
Hyderabad Dec. ..	8⅜ 8⅞	8⅛	10 0	—	10 0 0	115,000	Deccan	16, St. Helen's-place.
Kempinkote GdFd	2/- 2/6	2/-	0 5	—	0 3 6	665,473	India	6-7, Queen-st.-place.
Mysore ....G	2 11/16 2 13/16	2 9/16	1 0	2/- Feb. '95	1 0 0	250,000	India	6-7. Queen-street pl.
My. Harnhalli ...G	3/3 3/9	3/-	1 0	—	0 12 0	100,000	India	2, East India Avenue
Mysore Reefs ...G	5/- 6/-	5/-	1 0	—	1 0 0	134,788	India	6-7, Queen-street-pl.
Mysore West(N)G	14/- 15/-	14/-	1 0	—	0 19 0	127,408	India	Dashwood Ho., E.C.
Mysore Wynaad G	14/- 15/-	14/-	1 0	—	0 19 0	250,000	India	Dashwood Ho., E.C.
Nine Reefs ....G	2/6 3/-	2/6	0 10	—	0 10 0	50,000	India	6-7, Queen-street-pl.
Nundydroog ....G	1⅞ 2 xd	1⅞	1 0	1/6 Mar. '95	1 0 0	200,000	India	6-7, Queen-street-pl.
Ooregum (Df.O.)G	2⅞ 3	2⅞	1 0	2/6 Nov. '94	1 0 0	145,000	India	6-7, Queen-street-pl.
Do. (10% Pref.).	3⅜ 3⅝	3⅜	1 0	2/6 Nov. 94	1 0 0	95,536	India	6-7, Queen-street-pl.
Do. (10% Pref.).	2¾ 3	2¾	1 0	2/6 Nov. '94	0 5 0	24,464	India	6-7. Queen-street-pl.
Panang Corpn. T	—	—	1 0	15% Apr. '89	1 0 0	203,070	Malay Penin.	Blomfield Ho., E.C.
Pahang Kabang T	⅛ ¼	1/16	1 0	—	1 0 0	394,760	Malay Penin.	4a, Jeffrey's sq., E.C
S. Aust. Petroleum	1/3 1/9	1/3	1 0	—	0 18 6	108,000	Burmah	12, [illegible]ncras Ln., E.C.
Yerrakonda ....G	2/- 2/6	2/3	0 4	—	0 2 6	—	Mysore	6-7, Queen-street-pl.

NORTH AMERICAN MINES.

Name.	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Alaska Mexican...G	⅞	⅞	$5	7 1-5d. Nov. 94	$5	100,000	Alaska	30, St. Swithin's-ln
Alaska Treadwell G	2⅞ 3⅛ xd	2⅞	$25	1/6 Jan., '95	$25	200,000	Alaska	30, St. Swithin's-ln.
Almada and T... S	-/3 -/6	-/3	2/6	—	0 2 6	351,008	Mexico	6, Queen-street-plac
American Belle...S	1/- 1/6	1/-	1 0	-/6 Mar. '91	1 0 0	398,890	Colorado	25A, Old Broad-street
Anglo Mexican ...S	—	—	5 0	3/- Jan. '90	5 0 0	74,850	Mexico	23, College Hill.
Arizona (Pref.) Cu	12/9 13/3	—	4 0	—	4 0 0	158,920	Arizona	74, Geo.-st, Edinbor
Do. 6½ A Deben.	90	—	100 0	—	100 0 0	£135,300	Arizona	74, Geo.-st., Edinbor'
Do. 7% B Deben.	73	—	100 0	—	100 0 0	£181,300	Arizona	74, Geo. st. Edinbor
Big Creek .... Ay.	2/6 3/6	2/6	1 0	1/- Dec. '91	1 0 0	50,000	Nevada	2, Pancras-lane, E.C.
California ....G	—	—	0 10	-/6 May 90	0 8 9	129,571	Colorado	St. George's Ho. E.C.
Canadian Phos. P	—	—	1 0	-/6 Nov., '90	1 0 0	73,334	Canada	155, Fenchurch-st.
Colorado Boy ....S	—	—	1 0	—	1 0 0	112,491	Colorado	Abchurch-chbrs. E.C
Cortes ....S	—	—	1 0	3% Feb. '93	1 0 0	300,000	Nevada	Suffolk House, E.C.
Decatur ....Sl.	—	—	1 0	—	1 0 0	32,500	Colorado	35, Queen Victoria-st.
Do. .... (Pref.)	—	—	1 0	—	1 0 0	12,500	Colorado	35, Queen Victoria-st
De Lamar ....GS	28/6 29/-	29/	1 0	1/- Jan, '95	1 0 0	400,000	Idaho	6, Draper's-gardens.
Dickens Custer GS	1/6 2/	1/6	1 0	—	0 19 9	420,000	Idaho	Winchester Ho. E.C
Elkhorn ....S	9/6 10/6	8/-	1 0	-/9 Dec. '94	1 0 0	175,007	Montana	6, Draper's-gardens.
Emma ....S	-/9 1/3	-/3	0 5	—	0 5 0	403,618	Utah	15, Geo-st, Mansn. Ho
Flagstaff ....S	—	—	1 0	—	0 18 9	240,000	Utah	Dashwood Ho., E.C
Fisk .... G	—	—	1 0	6d May, 94	1 0 0	134,000	Colorado	5, Fenchurch st.
Garfield ....GS	—	—	1 0	-/6 Dec. '88	0 19 6	98,185	Nevada	Suffolk House, E.C.
Golden Feather G	8/- 9/-	8/6	1 0	—	1 0 0	180,000	California	S. Stephens Cs E C.
Golden Gate ....G	3/- 4/-	3/-	1 0	—	0 19 6	79,600	California	St. Stephens Cs E C.
Golden Leaf .... G	2/9 3/3	2/9	1 0	—	1 0 0	300,259	Montana	8, Draper's Gardens.
Golden Valley...G	1/3	1/3	1 0	—	0 19 0	55,507	Colorado	15, Angel Court.
Harquahala.... G	5/ 6/	5/-	1 0	-/6 Oct., '94	1 0 0	300,000	Arizona	6, Draper's Gardens.
Holcomb Valley G	3/- 3/6	2/6	0 5	—	0 5 0	540,000	California	14, Cornhill, E.C.
Idaho ....GS	3/9 4/3	3/-	0 5	-/2 Dec. 94	0 4 8	143,439	Idaho	140, Leadenhall-st
Jackson Goldfields	1/7½ 1/10½	1/9	5 0	—	0 5 0	408,635	California	11, Poultry, E.C.
Jay Hawk (New)G	2/3 2/9	1/6	1 0	-/6 Dec. '92	0 19 3	285,000	Montana	Dashwood House.
La Plata ....S	2/3 2/9	1/6	0 5	1/3 Oct. '82	0 4 6	405,000	Colorado	11, Poultry, E C.
La Yesca ....GS	2/9 3/3	2/9	1 0	—	0 19 0	76,015	Mexico	20, Bucklersbury, E.C
Maid of Erin ...S	4/6 5/6	4/6	1 0	4c.p.sh Sept'94	1 0 0	575,000	Colorado	43, Threadneedle-st.
Mammoth Gold ...	—	—	1 0	—	1 0 0	400,000	Pinal Arizona.	257, Winchester Ho.
Mesq. d'l Oro (P) G	—	—	5 0	—	5 0 0	10,000	Mexico	Dashwood Ho., E.C.
Mesq. d'l Oro (O) G	—	—	5 0	—	5 0 0	10,000	Mexico	Dashwood Ho., E.C.
Montana ....GS	11/6 12/6	11/-	1 0	-/3 Apr. '95	0 19 0	657,158	Montana	Gresham House, E.C.
New Colorado ...S	—	—	1 0	—	0 17 0	65,000	Colorado	Abchurch Cham. E.C
N. Consolidated SC	—	—	0 5	—	0 3 6	248,576	Nevada	15, Angel-court, E.C
N. Gold Hill ....G	-/4½ -/7½	-/3	1 0	—	0 19 9	191,045	N. Carolina	15, George-st., E.C.
New Guston ....S	10/- 12/6	10/	1 0	1/- Oct. '92	1 0 0	110,000	Colorado	25A. Old Broad-st.
New Hoover Hill G	-/3 -/6	-/3	0 10	-/9 Dec. '85	0 10 0	120,000	N. Carolina	Langthorne Ho., E.C.
Palmarejo .... GS	1/3 1/9	/9	1 0	—	1 0 0	418,888	Mexico	4, Copthall-buildings
PinosAltos(Df) GS	5/- 6/-	5/	1 0	-/6 Mar.' 90	1 0 0	100,000	Mexico	110, Cannon-street.
Do. 15% Cum Pref	—	—	1 0	—	1 0 0	60,000	Mexico	110, Cannon street.
Pittsbg Con. (N) G	—	—	1 0	1/6 Mar. '88	0 19 0	77,147	Nevada	Suffolk House, E.C
Poorman Con. GS	1/3 1/9	1/3	0 5	—	0 5 0	273,948	Idaho	5, Copthall-b'gs. E.C
Red Mountain ...S	—	—	1 0	—	1 0 0	46,6[illegible]6	Colorado	11, Poultry, E.C.
Richmond ...GSL	9/9 11/3	8/9	5 0	1/- Nov. '94	5 0 0	54,000	Nevada	44, Coleman-street.
Ruby ....GSL	—	—	0 5	—	0 5 0	221,371	Nevada	22 St. Mary Axe.
Sierra Butter ...G	10/- 12/-	10/-	2 0	-/6 Oct. '94	2 0 0	122,500	California	138, Leadenhall-st.
Do. Plumas Eur. G	11/3 13/9	12/6	2 0	-/9 Oct. '94	2 0 0	140,265	California	138, Leadenhall-st.
Springdale ....G	2/9 3/3	2/6	$1	2d Aug., 94	$1	1,000,000	Colorado	20, Abchurch Lane.
Twin Lake Placers	1⅛ 1¼ xd	1⅛	1 0	3/- Feb. '95	1 0 0	26,000	Colorado	5, Lawrence P. Hl. E C
United Mexican S	1/ 1/3	1/-	1 0	2/6 May, '87	1 0 0	906,654	Mexico	3, Gt. Winchester st.

SOUTH AND CENTRAL AMERICAN MINES.

Name.	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Anglo-Chilian Pf N	8 8½	8	10 0	4/5 Dec. '89	10 0 0	35,000	Antofagasta	123, Bishops.-st. W.
Do. 6% RylstMB	99 101	99	100 0	6% Jan., '95	100 0 0	£200,000	Antofagasta	123, Bishops.st. W.
Antio. (Pref.) G.S.	—	—	1 0	-/6 Mar. '90	1 0 0	22,82[illegible]	Colombia	184, Gresham Ho.
Antioquia (ordiny)	—	—	1 0	—	1 0 0	42,453	Colombia	184, Gresham Ho.
Caratal ....G	1/1½ 1/4½	1/1½	2/6	—	0 2 6	1,330,000	Venezuela	57, Moorgate-st. E.C
Caylloma ....S	1¼ 1⅜	1⅛	2 0	1/- Apr. 94	2 0 0	125,000	Peru	52. Leadenhall street
Colon ....G	1/- 1/6	1/-	0 5	—	0 4 0	200,000	Colombia	5, Copthall-bdgs., E.C.
Colorado Nit. ...N	2⅜ 3	2⅜	5 0	8% Nov., '94	5 0 0	32,000	Chili	17, King-st., Liverp'l.
Colombia ....G	—	—	20 0	10 frs. Aug. 94	20 0 0	—	Venezuela	Ciudad Bolivar.
Colombian Hy...G	10/- 11/-	11/-	1 0	1/- Sept. '94	1 0 0	75,000	Colombia	10, Blomfield-street,
Copiapo C	1½ 1⅝	1⅝	2 0	1/- Dec. '94	2 0 0	100,000	Chili	Dashwood House, E.C
Darien "A" ....G	3⅛ 3⅜	3 1/16	1 0	—	1 0 0	49,553	Colombia	Manchester.
Don Pedro ....G	6/6 7/6	4/6	1 0	—	0 18 6	133,102	Brazil	24-5, Devonsh. Cs. E.C
El Callao ....G	7/6 12/6	7/6	5 0	9½d Feb. '94	5 0 0	257,600	Venezuela	8, Bishopsgt.-st. Wn
Frontino & B....G	1¼ 1⅜ xd	1¼	1 0	1/- Mar. '95	1 0 0	128,662	Colombia	134, Gresham House
Glenrock ....G	/9 1/3	1/	1 0	—	1 0 0	199,948	Argen. (& Ind)	3-5, Queen-street, E.C
Gravel ....G	4/ 5/	4/	1 0	—	0 18 6	100,000	Colombia	10, Blomfield-street
Guadalupe ....GS	3/6 5/-	3/6	1 0	—	1 0 0	120,000	Honduras	11a, Unionct. Old Brdst
Huanchaca ....S	—	—	5 0	4/- Sept. '94	5 0 0	320,000	Bolivia	10, Avnu. d'Alma, Paris
Javali ....G	-/6 1/6	-/6	0 2	8½% '91	0 2 0	105,234	Nicaragua	139, Cannon-street.
Julia Taltal ....N	11/16 13/16	¾	1 0	—	1 0 0	200,000	Chili	79½, Gracechurch-st.
Lagunas ....A	6⅛ 6⅜	6⅜	5 0	15p.c. Dec. '94	5 0 0	120,000	Tarapaca	3, Gracechurch st.
Lautaro ....N	7¾ 8¼	8	5 0	7/6 Dec. 94	5 0 0	110,000	Chili	70, Gracechurch st.
Liverpool ....N	11 12	11	5 0	10 p c Dec. 94	5 0 0	22,000	Chili	Liverpool.
Loma ....G	-/3 -/9	-/3	1 0	—	1 0 0	300,000	Colombia	5, Copthall-buildings
London Nit. ....N	1⅝ 2¼	1¾	3 0	3/4¾ Nov. '89	3 0 0	10,000	Chili	9, Gracechurch-st.
LondonNit. (Pref.)	4 4⅛	2⅜	5 0	8% Nov. '94	5 0 0	22,000	Chili	9, Gracechurch-st.
Macate	3/ 3/6	2/9	0 2	—	0 2 0	200,000	Peru	11, Old Broad-st, E.C
New Tamarugal N	⅛ ⅝	⅛	1 10	1s. Dec. '94	1 10 0	130,000	Tarapaca	50, Lime-street, E.C
Do. 8% Cum Pref	15/16 1 1/16	15/16	1 10	8 p.c. Feb. '95	1 10 0	130,000	Tarapaca	50, Lime-street, E.C
Do 6 p.c. Debs ...	88 92	88	100 0	6 p.c. Feb. '95	100 0 0	£260,000	Tarapaca	50, Lime-street, E.C
Orita ....G	1/3 1/9	1/3	1 0	1/- April '89	1 0 0	30,000	Colombia	10, Blomfield-street.
Ouro Preto ....G	—	—	1 0	—	1 0 0	80,000	Brazil	6, Queen-street-place
Pac. & Jazpampa N	4⅛ 4⅜	4⅛	5 0	5/- Aug. '94	5 0 0	72,000	Tarapaca	3, Gracechurch-st.
Primitiva ....N	1⅛ 2/-	1⅛	5 0	20% Oct. '89	5 0 0	40,000	Chili	Liverpool.
Quebrada C	3/- 5/-	3/-	3 0	5% Mar. '92	3 0 0	241,956	Venezuela	38, Nicholas Lane.
Quebrada C	—	—	8 k.	6% Feb., 94	100 0 0	£100,000	Venezuela	38, Nicholas Lane.
Rosario ....N	5⅛ 5⅜	5⅛	5 0	7/6 Feb. '95	5 0 0	120,000	Chili	57½, Old Broad-street
Rosario (6% Deb.	106 107	105	100 0	6% Oct. '94	100 0 0	£175,000	Chili	57½, Old Broad-street
St. John del Rey G	26/- 26/-	26/-	1 0	10% June '82	1 0 0	284,200	Brazil	Finsby. Ho., Blm'fld
San Donato ....N	2¼ 2⅜	2¼	5 0	—	5 0 0	32,000	Chili	18, King-st., Liverp
San Jorge ....N	5⅛ 6⅛	5⅞	5 0	7/6 Sept. '94	5 0 0	75,000	Chili	9, Gracechurch-st.
San Pablo ....N	2⅜ 3	3	5 0	2½% Nov., '94	5 0 0	38,000	Chili	Gracechurch-st

'THE MINING JOURNAL" SHARE LIST—(Continued).

SOUTH AND CENTRAL AMERICAN MINES—(Continued).

Name.	Closing Price, Mar.22,1895	Closing Price, Mar.15, 1895.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d			
Santa Barbara ...C	—	—	0 10	1/3 Dec. '88	0 10 0	60,000	Brazil	Liverpool
Santa Elena .....N	⅝ ¾	⅝	5 0	5/- Oct. '94	5 0 0	22,000	Tarapaca	3, Gracechurch-st.
Santa Rita .....N	4 4½	4½	5 0	15% Apr., '94	5 0 0	20,000	Chili	DashwoodHouse,E.C
San Sebastian ...N	2⅝ 2⅞	2⅝	5 0	5/- Dec,'94	5 0 0	29,000	Chili	DashwoodHouse,E.C
Segovia .....G	— —	—	5 0	—	0 4 0	160,000	Colombia	5, Copthall-buildings
Sucre Pref.....G	— —	—	1 0	10% Dec. '94	0 15 0	840	Colombia	23, St. Swithin's ln.
Sucre Ord.....G	— —	—	1 0	6% Dec, '94	1 0 0	10,000	Colombia	23, St. Swithin's ln.
			1 0	—	0 19 6	200,000	Colombia	5, Copthall-buildings
Tetuan .....G	— —	—	5 0	10/- Dec., '94	5 0 0	14,000	Colombia	18, Finsbury-circus.
Tolima "A" .....S	6¾ 7¼ xd	6¾	5 0	10/- Dec., '94	5 0 0	6 000	Colombia	18, Finsbury-circus.
Do. "B" .....S	6 6½ xd	6						
Vic. & Altamira ...	2/- 2/6	2/6	0 5	—	0 5 0	200,000	Venezuela ...	Broad-st. Avenue.
West Indian.....G	— —	—	0 5	—	0 5 0	700,000	San Domingo	49, Queen Victoria-st
Zacatecas .....G	— —	—	0 5	—	0 5 0	261,422	Ecuador.....	1, Gt. Winchester-st.

AFRICAN MINES.

Name.	Closing Price, Mar.22,1895	Closing Price, Mar. 15, 1895.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
African Coal .....G	7/3 7/9	7/-	1 0	—	0 16 6	320,000	Middleburg ...	19,St. Swithin's-lane
African Gold Con.	4/- 5/-	3/6	0 10	20 p.c. Jan.'95	0 8 0	300,000	Mossel Bay ...	18, Tokenhouse-yard
Afrikander ..... G	1⅛ 1⅝	1 11/16	1 0	—	1 0 0	40,000	Transvaal	19, St. Swithin's-lane
Agnes Block..... G	13/9 16/3	13/9	1 0	—	1 0 0	78,507	Transvaal	54, Old Broad-street
Alexandra EstateG	7/- 8/-	10/9	1 0	—	1 0 0	225,000	Witwatersrd.	Warnford Court, EC.
Anglo-French Exp.	2 1/16 2 1/16	2 1/16	5 0	10% Dec. 94	5 0 0	30,300	S. Africa	170, Winchester Ho.
Appantoo ..... G	— —	—	1 0	—	1 0 0	77,585	West Coast ...	Dashwood House.
Aurora..... G	20 - 22/-	20/-	1 0	5% Mar,'93	1 0 0	65,000	Witwatersrd.	8, Old Jewry.†
Barkis Eersteling G	2/6 3/-	3/3	0 10	—	0 10 0	520,000	Transvaal	85, Gracechurch-st.
Balkis Land	4/ 4/6	4/6	0 10	—	0 10 0	520,000	Transvaal	85, Gracechurch-st.
Banket..... G	6 6 7/6	7/6	1 0	—	1 0 0	200,000	Witwatersrd.	Johannesburg.
Bantjes Reef .....G	3½ 3¾	2 15/16	1 0	—	1 0 0	83,000	Witwatersrd.	Warnford-court,†‖
Barrett..... G	9/6 10/6	10/6	0 10	—	0 9 0	207,496	De Kaap	17, Basinghall-street
Bechuanaland Exp	1 15/16 2 1/16	33/	1 0	1/- Mar. 95	1 0 0	200,000	Bechuanaland	19, St. Swithin's-lane
Big Golden Quarry	1/6 2/	—	5/-	—	0 5 0	483,226	Kaap River ...	4, Bishopsgte. st. Wn.
Block "B" Lang.	21/ 22/	24/6	1 0	—	1 0 0	535,000	Witwatersrd.	5, Princes-st., E.C.†
Boovsen Land .G	2 2¼	2	1 0	—	0 12 0	95,000	Transvaal.....	4, Tokenhouse-bldg
Brit. S. A. Char. ..	53/- 57/-	46/	1 0	—	1 0 0	2,000,000	S. Africa	19, St. Swithin's-lane
Buffelsdoorn..... G	5⅛ 5¾	5⅞	1 0	—	1 0 0	250,000	Potchefstroom	7, Lothbury.
Bulawayo Synd. ..	½ ¾pm	5/6	1 0	—	1 0 0	12,000	Matabeleland	10, Helen's Place.
Cape Asbestos	2½ 2⅝	2½	1 0	—	1 0 0	50,311	Orange River	19, St. Swithin's-lane
Cape Copper C	1 15/16 1 15/16	1⅜	2 0	1/3 Dec. '94	2 0 0	300,000	Cape Colony..	9, Queen-street-place.
Do. 6 % Pref. ...	2 2¼	2	2 0	1/3 Dec. '94	2 0 0	45,000	Cape Colony	9 Queen-street-place.
Cassel Colliery.....	3¾ 4 xd	3¾	1 0	10pc Dec. '94	1 0 0	75,000	NrJohannesbg	99, Cannon-street.
Cen. Montrose... G	1/- 2/-	1/-	1 0	—	0 18 6	69,000	Transvaal ...	15,George st Mn.Ho.
Champ d'Or..... G	4⅝ 4⅞	4⅞	1 0	4/- Jan. 95	1 0 0	116,016	Witwatersrd.	8, Old Jewry, E.C.
Champ d'OrDeepG	35/6 36/6	34/-	1 0	—	1 0 0	117,499	Witwatersrd.	8, Old Jewry, E.C.
City and Suburb.G	23¼ 24¾	20¾	1 0	25% Mar. '94	1 0 0	75,000	Witwatersrd.	1, Crosby Square.†
Coetzeestroom ...D	3/8 4/6	2/-	0 5	—	0 5 0	140,000	De Kaap	105,Leadenhall-street
Con. Buitfontein D	28/ 39/	28/-	1 0	33⅓% Sept. '94	1 0 0	721,500	Griqualand W	62, Lombard-st.
Con. Deep Levels G	4⅞ 5⅛	5	1 0	4/- June '94,	1 0 0	187,250	Transvaal	30, St. Swithin's-lane
Con. G. Fields S A.	8 5/16 8 1/16	7⅞	1 0	15% Nov. '94	1 0 0	1,250,000	S. Africa	8, Old Jewry.
Do. 8 % Pref.	20/6 21/6	20/6	1 0	—	1 0 0	1,243,999	S. Africa	8, Old Jewry.
Do. 5½% Deben...	108½ 109½	109	5 0	5½ Jan, '95	5 0 0	600,000	S. Africa	8, Old Jewry.
Croesus Deep.....	2⅞ 3⅛	3¼	1 0	—	1 0 0	250,000	Witwatersrd.	1, Draper-gardens
Crown Reef ..... G	10½ 10¾	10⅜	1 0	25% Nov. '94	1 0 0	120,000	Witwatersrd.	120,Bishopsgt st Wn†
De Beers Consol. D	20½ 20¾	21⅛	5 0	12/6 Jan. '95	5 0 0	789,791	Transvaal	62, Lombard-street.
Do. 5% 1st Deb.....	108 109	108	100 0	5% Jan. '95	5 0 0	£3,500000	Transvaal	62, Lombard-street.
Do. 5½% Bul. Ob.	107 108	107½	100 0	5¼% Oct. '94	5 0 0	£720,100	Transvaal	62, Lombard-street.
Durban Roodept.G	7¾ 8	8	1 0	3/- Mar.,'95	1 0 0	£125,000	Witwatersrd.	28, Leadenhall-bldgs
Bastleigh .....G	2¾ 2¾	2	1 0	—	1 0 0	240,000	Klerksdorp...	14, Sherborne-lane.
East Rand..... G	3⅛ 3⅝	3¾	1 0	—	1 0 0	570,000	Witwatersrd.	170, Winchester-ho.
Evelyn ..... G	1½ 1⅝	1 5/16	1 0	10% Jan. '89	1 0 0	66,000	Witwatersrd.	28, Old Jewry, E.C.
Exploration	1⅝ 1¾pm	1⅝	1 0	1/- Dec. '94	0 4 0	148,000	S. Africa	30, St. Swithin's-ln.†
Exploring Co.	4⅜ 4⅝	3⅞	1 0	2/6- Feb,'94	1 0 0	69,350	S. Africa	19, St. Swithin's-ln.
Ferreira .. .. G	18⅛ 18⅝	18⅛	1 0	80% Mar. '95	1 0 0	45,000	Witwatersrd.	120,Bishopsgt st.Wn†
Forbes Reef (Nw)G	3/6 4/6	3/6	1 0	—	1 0 0	105,000	De Kaap	45-6, Leadenhall-st.
F. Johnson & Co....	20/- 21/-	17/6	1 0	—	1 0 0	200,000	Mashonaland	8, Old Jewry†
Geldenhuis DeepG	8¾ 9	8⅝	1 0	—	1 0 0	265,000	Transvaal	30,St. Swithin's-lane.
Geldenhuis Est. G	6⅝ 6¾	6¾	1 0	10% Oct. '94	1 0 0	187,500	Witwatersrd.	120 Bishopsgt st.Wn†
Do. Main Reef	21/- 22/-	24/	1 0	—	1 0 0	150,000	Witwatersrd.	Warnford Court, E.C
George and May G	2½ 2¾	27/6	1 0	—	1 0 0	112,750	Witwatersrd.	7, Great St. Helen's,
George Goch ...G	1⅞ 2	2¼	1 0	—	1 0 0	100,000	Witwatersrd.	Johannesburg.
Ginsberg	4 4¼	4¼	1 0	—	1 0 0	130,000	Driefontein	Warnford Court,E.C†
Glencairn .....G	3/6 4/6	3/6	1 0	7½ pc Jan. 95	1 0 0	200,000	Witwatersrd	2, Draners-gardens,
Gold Estates T... G	4⅜ 4¾	4⅝	1 0	15% Dec.'89	0 10 0	130,000	Transvaal	46,Queen Victoria-st
Gld. Fis. Deep...G	13/9 16/3	15/-	1 0	—	1 0 0	600,000	S. Africa	8, Old Jewry.
G. F. of Mashonaland	3/9 4/3	3/9	0 4	—	0 4 0	400,000	Mashonaland	19, St. Swithin's-ln.
G.F.Tierrad' Fuego	17/- 18/-	17/-	1 0	—	1 0 0	150,000	Mozambique..	2, Tokenhouse Bldgs.
Grahamstown .. G	3/3 3/9	3/3	0 5	7½% Mar. '93	0 5 0	400,000	Witwatersrd.	14, Throgmorton-st.
Graskop ..... G	7⅛ 7¾	7⅜	10 0	2 % Sept, '94		105,700	Lydenburg ..	85, Gracechurch-st.
Griqualand W....D	10/- 11/-	10/-		—	10 0 0		Transvaal	62, Lombard-street
Guy Fawkes..... G	9/ 10/	11/8	0 10	—	0 8 0	24,000	Manica	Broad-st. Avenue
Gwelo Exploratn.	13/ 14/-	12/8	1 0	—	1 0 0	260,000	Zoutpansberg	79¼, Gracechurch-st.
Harmony (Pref) G	1⅞ 2⅛	1⅝	1 0	—	1 0 0	200,000	—	85, Gracechurch st.
Henderson's Trans	5¾ 6	6⅛	1 0	—	1 0 0	100,000	De Kaap	Warn ord-court.
Heury Nourse ...G	5/6 6/6	5/6	1 0	—	1 0 0	57,404	De Kaap	21, Mincing Lane.
Joe's Reef ..... G	3/8 4/8	3/-	1 0	—	1 0 0	99,537	Nr.Johannesbg	31, Lombard st., E.C.
Johannesburg G F	4¼ 5	4¼	1 0	12½% Nov.,'93	1 0 0	21,000	Witwatersrd.	Johannesburg.
Johannesburg Par	9½ 10	10⅛	1 0	30% Dec. '94	1 0 0	30,000	Witwatersrd.	8, Old Jewry.†
Jubilee ..... G	5⅝ 5¾	5⅝	1 0	25% Dec. '94	1 0 0	100,000	Witwatersrd.	120, Bishopsgt st.Wn†
Jumpers .....G	par ⅛ pm	pr ⅛pm	1 0	—	0 10 0	98,672	Kimberley ...	19, Finsbury circus.
Kimberley .. ..D	2 1/16 2 1/16	2 1/16	1 9	—	1 0 0	125,000	Kimberley ...	2, Drapers-gardens.
Kimberley Rdpt....	14/- 15/-	17/-	0 10	—	0 9 0	400,000	—	110, Cannon St.
Klerksdorp	1⅝ 1⅞	1⅝	1 0	—	0 5 0	50,000	Jacobsdaal ...	120, Bishopsgt st. Wn
Koffyfontein.....D	5 5¼ xd	5	3 0	10 p.c. Mar.'95	1 0 0	467,000	Witwatersrd.	59, Holborn Viaduct
Langlaagte Est. G	4¼ 4¾	4¼	1 0	5% Sept. '93	1 0 0	100,000	Witwatersrd	2, Drapers-gardens.
Do. Royal								

AFRICAN MINES—(Continued)

Name.	Closing Price, Mar.22,1895	Closing Price, Mar. 15, 1895.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Lisbon-Berlyn ...G	3/9 4/3	4/-	2/6	—	0 2 6	889,233	Lydenburg ...	110, Cannon-street.
Lionsdale	6/- 7/-	8/-	1 0	—	1 0 0	115,000	Lydenburg ...	85, Gracechurch-st.
London & S. A. Ex.	9¾ 10¼	9¼	0 10	3/- Mar. '95	0 10 0	100,000	S. Africa	19, Finsbury-circus.
Luipaards Vlei Est.	17/6 18/6	19/-	1 0	6% Mar, '90	1 0 0	319,093	Witwatersrd.	Warnford-court.†
Main Reef (New)G	19/- 20/-	17/6	1 0	—	0 10 0	300,000	Witwatersrd.	8, Old Jewry.
Mashon Agency...	1¾ 1⅞	1¾	1 0	—	1 0 0	100,000	Mashonaland	8, Old Jewry, E.C.
Massi Kessi	12/ 14/-	7/-	0 10	—	0 7 0	80,000	Manica	Broad Street Avenue
May Con. (New) G	3 1/16 3 1/16	2 15/16	1 0	—	1 0 0	430,000	Witwatersrd.	4, Lothbury.†
Metropolitan (N) G	2 3/16 2 5/16	2 5/16	1 0	—	1 0 0	75,000	Witwatersrd.	1, Crosby Square.†
Meyer & Charl....G	6 6¼	6⅞	1 0	30% Dec.,'94	1 0 0	71,687	Witwatersrd.	Warnford-court.†
Modderfontein .. G	14¾ 15	11¾	1 0	—	1 0 0	200,000	Witwatersrd.	Warnford-court †
Montrose..... G	⅝ ¾	⅝	1 0	3/- Feb, '90	1 0 0	70,000	De Kaap	65, New Broad-street
Moodies G.&E...G	1⅝ 1⅝	1 4/-	1 0	-/4 May '90	1 0 0	240,000	De Kaap	8, Old Jewry.†
Mozambique.	25/6 26/6	24/-	1 0	—	1 0 0	400,000	S. E. Africa ...	Broad-street House,
Namaqua C	— —	—	2 0	2/6 July '91	2 0 0	194,351	Namaqualand.	34, Leadenhall-bldg.
NewAurora WestG	— —	18/-	1 0	5% Mar., '93	1 0 0	30,000	Witwatersrd	1, Crosby Square
N.Belgium Land...	2/- 4/-	3/	1 0	—	0 17 0	167,362	Waterberg ...	53, Cornhill.
New Black Reef ...	7/- 8/-	7/-	1 0	—	1 0 0	76,000	Witwatersrd.	9, King William st
New Chimes..... G	1 1/16 1 1/16	2⅝	1 0	2/- Feb., '95	1 0 0	70,000	Witwatersrd.	8, Old Jewry, E.C.
New Clewer Estate	3 3½	3 1/16	1 0	5 % Aug. '92	1 0 0	100,000	Witwatersrd.	120, Bishopsgt.st.Wn
New Croesus..... G	3/- 4/-	3/-	1 0	—	1 0 0	195,000	Langlaagte ..	120, Bishopsgt.st.Wn
New Edwin Bray	4/6 5/6	6/	1 0	5% Dec, '89	1 0 0	560,250	Griqualand ..	110, Cannon-street.
New Gordon.... D	9¼ 9¾	9½	1 0	25 p c Mar. 95	1 0 0	195,000	Witwatersrd.	1, Crosby Square.†
New Heriot ..... G	21⅛ 21⅝	22	10 0	10% Mar., '95	10 0 0	100,000	Transvaal	5, Copthall-buildings
New Jagersf. ...D	4⅝ 4⅞	4¾	1 0	12½pc Mar,'95	1 0 0	150,000	Witwatersrd.	Winchester House
N. Kleinfontein G	2/6 3/6	2/9	1 0	—	1 0 0	102,000	Witwatersrd.	53, New Broad-street
New LouisD'Or..G	6⅛ 6¾xd	6⅝	1 0	20% Dec, '94	1 0 0	230,000	Witwatersrd.	2, Draper's-gardens.
New Primrose ...G	1/16dis 1/8pr	⅛ dis.	1 0	—	1 0 0	110,000	Witwatersrd	Bartholemew-house,
New Rand.....	3¾ 3⅞	2⅞	1 0	—	1 0 0	160,000	Witwatersrd	Warnford-ct., E.C.
New RietfonteinG	8/ 8/3	8/9	1 0	—	0 19 6	234,583	Griqualand W	30-1, St. Swithin's-ln
NewS.Augustine D	4¼ 4⅜	3¾	0 10	2/- Jan. 94	0 10 0	93,000	Witwatersrd.	1, Crosby-square.†
New Salisbury ...G	43/ 45/	39/6	1 0	—	1 0 0	113,801	Witwatersrd	24, N. John-st., L'pl.
New Spes Bona...G	3/6 4/6	2/6	1 0	—	0 18 6	111,857	E. CoastAfrica	31, Lombard-street.
New Virginia ...G	3/9 4/3	3/9	0 10	—	0 10 0	48,335	Transvaal	26, Budge-row, E.C.
Nigel ..... G	5⅞ 6⅛	6	1 0	10% Dec. '94	1 0 0	160,000	Witwatersrd.	1, Crosby-square.
Nigel Deep .....G	2 15/16 2 15/16	—	1 0	—	1 0 0	195,000	Heidelberg ...	8, Old Jewry.
Nigel Extension ...	14/ 14/6	—	10/-	—	0 10 0	150,000	Witwatersrd.	
North Sheba	4¾ 5	5	1 0	—	—	375,000		88, London Wall.
Nourse Deep.....	17/6 22/6	17/6	1 0	—	1 0 0	248,585	Witwatersrd.	120,Bishopgt.st .Wn.
Nyassa (Bearer) ...			1 0	—	1 0 0		Mozambique	Bartholemew House
Oceana	3¼ 3⅛	2⅝	1 0	25/- Nov.'89	1 0 0	326,000		
Oceana Developmnt	1¾ 1⅞	1½	1 0	—	1 0 0	50,000	Transvaal	4, Sun Court, 5 C
Orange F.S.E. ..D	4⅛ 5¼	5¾	1 0	1/- Sept., '94	1 0 0	284,000	Transvaal	4 Sun Court, E C
Orion..... G	3¾ 4	4	1 0	10% Mar. '95	1 0 0	30,000	OrangeF.State	10, Moorgate-street.
Otto's Kopje..... D	5/ 5/6	5/9	1 0	—	1 0 0	437,888	Witwatersrd.	8, Old Jewry.
Paarl Central ... G	29/6 30/6	29/6	1 0	—	1 0 0	138,750	Kimberley ...	110, Cannon-st., E.C.
Pardy's Mozambq.	2¾ 2⅞	3/-	0 10	1/- Jan. 95	1 0 0	15,000	Transvaal	120,Bishopsgt st.Wn.
Piggs Peak, New G	10/6 11/6	11/-	1 0	—	0 10 0	230,326	S. E. Africa	Broad St. Avenue.
Potchefstroom... G	10/6 11/6	14/6	1 0	—	0 17 0	161,000	Swaziesland ..	6, Queen-street-place
President Land ...	5/- 6/-	5/-	1 0	—	1 0 0	193 325	Potchefstroom	19, Bury-st., E.C.
Princess Estate G	3 1/16 3 1/16	3	1 0	—	1 0 0	72,046	Transvaal	17, Basinghall Street
Randfontein ...G	37/6 38/6	34/6	1 0	—	1 0 0	1,916,500	Witwatersrd.	33, Cornhill, E.C.
Rand Mines ..... G	28¾ 28¾	27¾	1 0	—	1 0 0	332,708	Witwatersrd	59, Holborn Viaduct.†
Read's Drift ..... D	16/3 18/9	16/3	1 0	—	1 0 0	50,000	Witwatersrd.	120, Bishopsgt st.Wn†
Robinson ..... G	8¾ 9	8⅝	5 0	8/- Jan. '95	5 0 0	541,750	Transvaal	19, Finsbury circus.
Roodepoort Deep	3⅛ 3⅜	3⅜	1 0	—	1 0 0	110,000	Transvaal	28, Austin Friars, E.C
Roodepoort Un. G	5 5¼	5⅛	1 0	10p.c. Dec. '94	1 0 0	100,000	Witwatersrd.	8, Old Jewry, E.C.
Sheba ..... G	28/- 29/-	28/-	1 0	1/- Sept. '94	1 0 0	614,450	Witwatersrd.	Warnford-court.†
Sliati ..... G	12/6 13/6	8/6	1 0	—	0 17 6	625,000	Lydenburg	85, Gracechurch-st.
Simmer & Jack...G	13¾ 14⅛	14⅛	1 0	10% Feb. '95	1 0 0	85,000	Zoutpansberg	4, Sun Court, E.C.
S. A.Gold Trust ...	4⅛ 4¼	3⅞	1 0	6/6 Jan. '95	1 0 0	220,000	Witwatersrd.	8, Old Jewry.
Southern Land.....	5/- 6/-	5/-	1 0	—	0 15 0	80,000	South Africa.	8, Old Jewry.
Southern Land.....	8/6 9/6	8/6	1 0	—	1 0 0	20,000	Grigld. W &	19, St. Swithin's-ln.
South West Rand	2¾ 2¼	1 7/16	1 0	—	1 0 0	158,000	Brit. Beeh	19, St. Swithin's-ln.
Spitzkop (New) G	11/- 12/-	12/-	1 0	—	1 0 0	99,070	Witwatersrd.	Winchester House.
Stanhope ..... G	2 2¼	2⅛	1 0	20% Jan. '95	1 0 0	34,000	Lydenburg ...	15, Bishopsgt-st, Wt
Sutherland R. ...G	24/6 25/6	24/6	1 0	—	1 0 0	220,000	Witwatersrd.	1, Crosby Square.†
Teutonia..... G	1 5/16 1	—	1 0	—	1 0 0	96,000	Zoutpansberg.	Dashwood Ho.
Thistle Reef ..... G	-/8 1/-	6	0 5	—	0 5 0	150,000	Witwatersrd.	8, Old Jewry.
Trans. Coal Trust...	1⅜ 1¾	1 11/16	1 0	1/- Mar. '95	1 0 0	439,965	Barberton	Copthall House
Trans. Est. & Dev.	16/6 17/6	16/-	1 0	—	1 0 0	285,700	Witwatersrd.	Broad-st. House, E.C
Trans.Gold Exp.G	4 4⅛	4⅜	1 0	1/- Jan. '95	1 0 0	250,000	Transvaal	76, O dBroad-st E C.
Trans. Land....	10/6 11/	6/6	1 0	—	1 0 0	79,915	Transvaal	Suffolk House, E.C
Trans. Land.....	4/- 5/	3/6	1 0	—	0 15 0	169,999	Transvaal	Suffolk House, E.C.
Treasury ..... G	— —	—	1 0	'21½% Sep.'91	1 0 0	26,000	Witwatersrd.	33, Cornhill.
Turffontein Est. ..	— —	—	1 0	2½ Nov. 94	1 0 0	40,007	So. Africa	Johannesburg.
Un. Ivy Reef..... G	1 1⅛	1	1 0	2½ Jan. '94	1 0 0	45,000	Transvaal	130, Winchester Ho.
U. Langlaagte(N)G	3 3/16 3 1/16	2 11/16	1 0	—	1 0 0	285,000	Witwatersrd.	110, Cannon-street
United Pioneer.... G	27/6 28/6	24/6	1 0	—	1 0 0	75,000	De Kaap	23, St. Swithin's-ln.
Van Ryn ..... G	6¼ 6½	6⅜	1 0	—	1 0 0	132,000	Witwatersrd.	16, S.Helen's-pl, E.C.
Village Main Reef	6⅜ 6⅝	5⅞	1 0	—	1 0 0	190,000	Gold Coast ...	18, St. Swithin's-ln.
Wassau .....G	— —	—	1 0	—	1 0 0	55,000	Witwatersrd.	8, Old Jewry.
Wemmer .....G	8⅞ 9⅛	9⅛	1 0	10% Nov. '91	1 0 0	700,000	Witwatersrd.	147, Cannon-street.
Willoughby's Con	1⅝ 1¾	1⅜	1 0	—	1 0 0	280,000	Mashonaland	19, Bury-st., E.C.
Wolhuter .....G	6⅛ 6⅜	5⅜	1 0	—	1 0 0	120,000	Witwatersrd.	3, Copthall-bldgs.
Wolverand.....G	7⅞ 8⅛	8⅛	1 0	10 p c Apr., '94	1 0 0	18,750	Transvaal.....	19, Bury-st., E.C.
Wolverand.....G	1 1/16 ⅞	5/16	1 0	2/- Apr., '94	1 0 0	39,021	Transvaal	Warnford-court,†
Worcester .....G	4⅜ 4⅝	4⅜	1 0	—	0 18 0	90,727	Witwatersrd.	Blomfield House.
Zambesia Explors.	3¾ 4	3⅛	1 0	20% Jan. '95	1 0 0	45,000	Transvaal	8, Old Jewry.†
				—	1 0 0			13, George-st., E.C.

MR. J. H. HAMMOND ON THE RAND AND RHODESIA.

THE monthly dinner of the Anglo-African Writers' Club was held on Monday evening at Previtali's Hotel, Mr. WILLIAM EGLINGTON (Chairman) presiding. Mr. John Hays Hammond was the guest of the evening.

The CHAIRMAN, in proposing the toast of "The Guest of the Evening—John Hays Hammond, Esq.," said that he must be ignorant indeed who did not recognise in Mr. Hammond's name that of one of the most eminent mining experts of the time. (Hear, hear.) The club might consider itself signally fortunate in that Mr. Hammond had found the requisite leisure out of the few short days which remained to him of his stay in England to accept its invitation to dine with the members that evening. To none more worthy of the hospitality of the club could its invitation have been extended. To such men as he South Africa owed a great and lasting debt of gratitude. The great reputation which had placed Mr. Hammond absolutely at the head of his profession, not only in the United States, of which he was a citizen, but also in Great Britain, brought him to Johannesburg, and entitled him to every respect when he was able to speak authoritatively, and confirm the enormous wealth of the auriferous deposits of the Rand. His *cachet* had unquestionably raised the status of the South African mines in the eyes of the public. (Hear, hear.) America, as the principal mining country of the world, had been singularly fortunate in the large number of distinguished engineers which her mines had brought to the front. It was equally fortunate for the British investor, on the other hand, that these men were not solely wedded to their own country. Otherwise South Africa, and the Witwatersrand in particular, might have remained in the chaotic condition in which they remembered it in 1888. Then it was a rarity to find a manager who was acquainted with even the primary principles of mining. (Hear, hear.) Thanks to the advent of such men as Mr. Gardner Williams, of the De Beers Consolidated Mines; Mr. H. Perkins of the Rand Mines; Mr. John Hays Hammond, of the Consolidated Gold Fields of South Africa, all fellow-countrymen, and certainly a very worthy trio, all that had been changed. To-day the wondrous gold production of the Rand enchained the attention and commanded the respect of the whole civilised globe. Mr. Hamilton Smith, the well-known expert, who proceeded to Johannesburg about 12 or 18 months ago on behalf the house of Rothschild, stated, after his inspection of the Witwatersrand Mines, that, in his deliberate opinion, the value of the conglomerate deposits of the Rand was the enormous total of £325,000,000. (Hear, hear.) The engineer sent out by the German Government—and he was a man upon whose judgment naturally that Government placed the utmost reliance—exceeded Mr. Smith's estimate by no less than £125,000,000. There were 60 or 70 dividend-paying companies on the Rand at present in full work, and hey distributed last year in dividends among the shareholders, no less a sum than, in round figures, £1,500,000, which was in excess of that of 1893 by about half-a-million sterling (Hear, hear.) These facts, which were not perhaps sufficiently understood by the investing public, were ample in themselves to justify the confidence which South Africans felt in the unparalleled productiveness and the permanence of the Witwatersrand gold fields. But if, in addition to the splendid output which the Johannesburg Chamber of Mines was able to record every month, one counted the yield of gold from the De Kaap, Lydenburg, Klerksdorp and other similar centres, it would, he thought he was safe in saying, he found that the South African output, as a whole, now led the world in gold production. (Hear, hear.) Returning to Mr. Hammond, the Chairman said that he went out to South Africa at the instigation of Mr. Barnato, who had always been solicitous to secure the most expert advice to safeguard his vast interests in the country. Under his auspices, Mr. Hammond brought the great majority of the mines which were known as the Barnato group, into the highest possible condition of development. Later on, as they all knew, he proceeded to Rhodesia in the interests of the British South Africa Company. From there he had but recently returned, and, doubtless, most of those present had perused the very careful and guarded report which followed his inspection of practically every important mining centre in the Chartered Company's territories. (Hear, hear, and applause.) Men with great reputations to lose were never too prone to praise unduly, and this was the case with Mr. Hammond. In this he somewhat reminded one of the opinions of the medical practitioners during the recent influenza epidemic. They never ventured to ascribe its ravages to the right cause until they were absolutely certain that the mysterious scourge was influenza, and nothing else. By some Mr. Hammond had been blamed because his report was not sufficiently roseate for the company-monger to seize upon as a pretext for his innumerable flotations. By others, again—and these comprised everyone who was interested in the country—Mr. Hammond had received unstinted commendation for the painstaking care he had taken not to unduly inflate the value of its mineral wealth by letting himself become a decided optimist instead of a disinterested mining engineer—(hear, hear)—whose first duty it is to speak of things as he found them. This, Mr. Hammond certainly appeared to have done. He had not indulged in specious generalities, but had stated emphatically that true fissure veins did exist in Rhodesia—(hear, hear)—and that it was highly mineralised. From this one might infer that it was a country worth having rescued from its late despotic ruler—worth even the sacrifice of that gallant little band that died on the banks of the Shangani. So far as he (the Chairman) had been able to ascertain the total number of syndicates or companies formed to-day in the Chartered Company's possessions, and in which it has an interest under its mining regulations, prob

that I had condemned the country unequivocally. This gentleman is a "bear" of Chartered shares. (Laughter.) Later on he became interested in certain properties, and he read my report again. On the second reading he said that it was decidedly favourable, but somewhat conservative. (Laughter) I admire the gentleman's versatility and his perseverance, but not so much his perspicuity, because he read the report a third time, and the third time he considered it most optimistic. In my happiest moments I have never had such sinister designs as to try to cater to all tastes, but I would recommend anyone who doubts the tenour of the report to read it twice. *In medio tutissimus ibis.* I think you will find, on the second reading, that what I meant to represent was that Rhodesia has a fair show, that the prospects are extremely brilliant as prospects, and that, given a fair chance, the country will ultimately develop into a great mining country. I say "a fair chance," and I hope the members of the Press will use their efforts to see that the country receives that. I mean, in the first place, that unmitigated swindles should be condemned unequivocally; that companies that are floated as mines which are only developed as prospects should be condemned. I mean that I hope the Press will insist on an adequate amount of capital being raised for the legitimate development of the country, instead of going into the pockets of the vendors—(hear, hear)—and that honest and capable administration direct the affairs of the mining investments of Rhodesia. I ask this on behalf of Rhodesia, and on behalf of myself, who have stood more or less father to the country. I think, in referring to Rhodesia, I should not omit to state, which I honestly believe to be true, that no mining country ever possessed the element of *personnel* as is present in Rhodesia. In all my experience I have never seen such a grand lot of men as you will find scattered all over Rhodesia—magnificent Englishmen, to whom it is a pleasure to be a second or third cousin. We Americans sometimes feel like that. (Applause.) I was too modest to say first cousin. (Applause and laughter.) Turning to the Transvaal, I would say, first of all, that the Transvaal needs no eulogy. It speaks for itself. You know its past history and its present position as well as I do. Let me anticipate a little. I am an optimist on the Transvaal. I went there, I must admit, somewhat sceptical. I did not avail myself of the early opportunities of conviction, but now, at the eleventh hour, I have begun to realise that the country has a great future with what were called the "very Deep Levels." My friend, Mr. Hamilton Smith, has taunted me with being an advocate of very Deep Levels. I would simply say that there are deeper levels yet, and that some of them are about to be developed. All the adverse criticism; all the difficulties suggested as to technical obstacles to be overcome in the way of deep shafts and heavy machinery; I firmly believe that all these considerations are absolutely insignificant with the present attainments of technical skill and knowledge. (Hear, hear.) I believe that what a few months ago was regarded as bare veldt, will, ultimately, be developed, and be productive of millions and millions of pounds—not only in the gross, but in dividends. I hope and trust that the great part of it will come to London. (Applause.) I think it is proper, and is only in justice, after the high compliment which has been paid me, as an American, that I should say, on behalf of my friends who have worked with me, my American assistants, and myself, that our first effort has been to utilise Englishmen. (Hear, hear.) I feel it is my duty, being employed by an English company, the mines being developed by English capital, to do all that is possible to bring the great bulk of the trade to England. I have insisted on that, wherever it is possible—of course, not to the sacrifice of work. Wherever special machinery was necessary, we have sent to the States; but it has been my aim to bring back the money for machinery, and all that is required by mining companies, to England. Reverting again to Rhodesia, I would say in connnection with mining laws, we cannot expect to please everybody. I have looked a little further ahead than some of those who originally drafted the mining laws, and who did not anticipate the numerous contentions that would arise by virtue of working the Deep Levels upon what is called the American system. We have taken the American mining law, and improved it very materially. We have eliminated the very objectionable features, remembering that there are always possibilities of contention as to ownership of ground in what is called the extra-lateral rights—that is, the foreign dip outside of one's surface boundaries. We have made a law which is, at all events, a definite law. It is more or less empirical, I must admit; but it is better to have a law that is definite rather than to have millions of pounds wasted on useless litigation. I hope there are no solicitors present. (Laughter.) My worthy friend Mr. Wessels will not object. There is one more matter upon which I should like to touch. The one great feature in the prosperity of the Witwatersrand, and of South Africa generally, is the fact that we are in the confidence of European investors. I am confident that the great section of the Rand interested in the flotation of companies abroad will look to it that no company—unless a first-class property—be presented to the French public; but I am afraid that there may be a temptation to those who do not look far enough ahead. I am very much afraid that they will kill the goose that lays the golden eggs. I hope that the English Press will watch zealously the interests of the French public as much as it has watched the interests of the British public. When I went to Charterland, I made my report to the Chartered Company, but I made it for the British public. I hope the Press will use its great and far-reaching influence to prevent any swindles being perpetrated upon the French public—who will be extremely useful to us all in the absorption of low-grade properties, which bear a smaller interest than we should be satisfied with here. (Laughter and applause.) We must encourage them by promoting good companies. Whereas the British demand 6, 8, or 10 per cent., the French are satisfied with a 4 or 5 per cent. investment, and we can reap the difference in profit. (Laughter.)

Mr. GEORGE CAWSTON said it was only for a few years that he had been connected in any way with South Africa, and it had been a continual fight against the prejudices of his friends to induce them to interest themselves in the country. Vast sums of English money had been invested and wasted in countries which did not belong to us, Millions had been wasted in North America, and millions in South America, but to get even the smallest attention for South Africa had been a matter of the greatest difficulty. The feeling that the whole thing is a swindle had been most difficult to combat, but he believed that was overcome now. It was to be hoped that now that the intelligence of England and Europe was opened to the value of South Africa harm would not be done to the movement by bringing forward matters of investment which were not investments. It was a duty for those interested in the country to do their best to see that whatever was brought forward from South Africa should be a credit to the country. In bringing forward the Chartered Company a great service was done to England. It secured a vast territory, which would otherwise have fallen to Germany. (Hear, hear.) The whole success of the Chartered Company was due to the intelligence and foresight of one man—a man whose name he must mention—and that was Mr. Rhodes. (Applause.)

REPORTS FROM THE MINES.

BRITISH MINES.

DEVON GREAT CONSOLS.—William Clemo, March 21: Wheal Anna Maria, engine shaft. The stope in the bottom of the 110 fathom level east is still holding good, and is yielding 14 tons of mundic per fathom. In the stope in the back of the 110 fathom level east there is a fine lode turning out 10 tons copper ore and 8 tons mundic per fathom.—Field shaft main lode. The stope in the back of the 130 fathom level west is producing 6 tons mundic per fathom.—South lode. In stope in bottom of 130 west the lode is worth 10 tons mundic and 2 tons copper ore per fathom.—Wheal Josiah, Richards' shaft. In the stope in the bottom of the 115 fathom level east the lode will produce 7 tons mundic per fathom. The stope in the bottom of the 115 fathom level east, No. 2, is yielding 9 tons of mundic per fathom.—Agne's shaft. The stope in the back of the 115 fathoms level west is producing 4 tons mundic per fathom.—Wheal Emma, Thomas' shaft. The stope in the bottom of the 100 fathom level east is worth 8 tons mundic and 1 ton copper ore per fathom. In the stope in the bottom of the 100 fathom level east, No. 2, there is a large and productive lode producing 14 tons mundic and 1 ton copper ore per fathom. In the stope in back of 100 fathom level east the lode is yielding 10 tons mundic, and 1 ton copper ore per fathom.—Inclined shaft. The stope in the back of the 150 fathom level east is producing 4 tons mundic and 1 ton copper ore per fathom. In No. 2 stope back of 150 east the lode is worth 4 tons mundic and 2 tons copper ore per fathom. In stope back of the 112 west the lode is producing 3 tons mundic and 1 ton copper ore per fathom. The stope in the bottom of the 100 west is yielding 4 tons mundic and 3 tons copper ore per fathom —New shaft, New South lode. In stope bottom of 130 east the lode will produce 4 tons mundic and 3 tons copper ore per fathom. In No. 2 stope in the bottom of the 130 east the lode is also yielding 4 tons of mundic and 3 tons copper ore per fathom.—Watson's engine shaft. The 172 fathom level is again being driven east, the lode being 4 feet wide, yielding stones of copper and mundic ores. In the 141 fathom level east the lode continues promising, and is yielding 4 tons copper and mundic ores per fathom. The stope in the back of the 172 fathom level east is yielding 5 tons copper and mundic ores per fathom. In the stope in back of 160 west the lode is worth 6 tons copper ore and mundic per fathom. The stope in bottom of 148 fathom level east is yielding 5 tons copper and mundic ores per fathom. The stope in the back of the 132 fathom level east is also yielding 5 tons copper and mundic ores per fathom. The weather has become more favourable, and all the workings underground and at surface are in full operation.

PRINCE OF WALES (EAST CORNWALL TIN MINING SYNDICATE).—J. Roberts, J. Pyne, May 20: In the 193 crosscut north the ground is still very hard and spare for driving, being composed principally of hard killas, mixed with capel and spar. Reset to six men at £14 per fathom. There is but little change in the crosscut at the 180, the ground, to a very great extent having the nature of the slide. Reset to two men at £5 10s. per fathom.

LEADHILLS.—W. H. Paull, March 18: Brown's vein. The 160 fathom level, north of Jeffrey's, is going forward at a fair rate, but vein still disordered, composed chiefly of flookan, spar, and stone. The vein in the 160 fathom level, south of Wilson's shaft, is 4 feet wide, showing a little spar, but contains no mineral to value. Unless an improvement takes place in the vein here now quickly, I purpose removing the men to sink on ore passed through in the level above over this point. In the stope over this level, south of Jeffrey's shaft, the vein is yielding 25 cwts. of ore per fathom. Nos. 1, 2, and 3 stopes over the 145 fathom level, north of Jeffrey's shaft, are producing from 25 to 30 cwts. of ore per fathom. In the 115 fathom level going south from old stope over the 130, the vein is large, and contains less ore; present value 15 cwts. per fathom. In this level, north of Jeffrey's shaft, the vein is 4 feet wide, still unproductive, but contains a good mixture of spar. The vein in the 100 fathom level south of Wilson's shaft is 4½ feet wide, still letting out water, but without any improvement. In crosscutting eastward at the 100 fathom level, south of Wilson's shaft, there is no change of note. In rise over drift above the 100 fathom level, south of Wilson's shaft, the vein is 3½ feet wide, producing 40 cwts. of ore per fathom. At the 85 fathom level, going south of Wilson's shaft, the vein is still unproductive. The stope over this level, south of Wilson's shaft, is yielding 50 cwts. of ore per fathom. In stope above the 70 fathom level, south of Wilson's shaft, the vein is worth 50 cwts. of ore per fathom. The stope over the 50 fathom level, south of Flat rod shaft, will now produce 30 cwts. of ore per fathom. In stope above the 35 fathom level south of same shaft the vein is worth 25 cwts. of ore per fathom. Men are now engaged clearing ore stuff. The stope below this level, south of ditto, is yielding 40 cwts. of ore per fathom. In driving south at Gripp's adit level, Sarrowcole vein continues large, of a promising character, containing a strong mixture of srar and barytes, very vughy, and letting out a heavy stream of water, but without ore to value.

SOUTH CONDURROW.—The lode in the ends at the 167 and the 153 fathom levels west of Marshall's shaft is without material alteration since last reported on. The rise in the back of the 167 is worth £9 per fathom. The stope west of the rise in the back of midway level is worth £10 per fathom. The stope in the bottom of the 153 fathom level is worth £11 per fathom. The stope in the back of the 153 is worth £11 per fathom.—(Signed) William Rich, William Thomas, Fred. Rich.

SOUTH FRANCES UNITED.—Setting report: To rise above the 246 fathom level west of Pascoe's against Daubuz's shaft by six men and three boys with a boring machine at £8 per fathom. Lode worth £7 per fathom. Stope in back of this level west of crosscourse is worth £16 per fathom. Stoping by 24 men at 5s. 6d. per ton. The 215 fathom level to drive west of rise by six men with a boring machine at £6 per fathom. Lode worth £10 per fathom. Stope in back of the 205 west of Marriott's is worth £9 per fathom. Stoping by six men at 4s. 6d. per ton. Stope in back of the 144 fathom level west of Grenville's is worth £8 per fathom. Stoping by six men at 3s. 6d. per ton. Stope in back of the 134 west of Grenville's is worth £9 per fathom. Stoping by six men at 4s. 6d. per ton. Stope in bottom of the 124 west of Grenville's is worth £10 per fathom. Stoping by 10 men at 5s. per ton. Rise in back of this level by four men at £11 per fathom. Lode worth £11 per fathom. No. 1 stope in back of this level is worth £10 per fathom. Stoping by four men at 4s. 9d. per ton. No. 2 stope in back of this level is worth £12 per fathom. Stoping by six men at 4s. per ton. The 114 fathom level to drive west of Grenville's by four men at £6 per fathom. Lode work £7 per fathom. Winze below this level by four men at £7 10s. per fathom. Lode worth £9 per fathom. Daubuz's shaft to sink below the 170 fathom level, to be carried 14 feet long and 7 feet wide, by 18 men at £30 per fathom. The 170 fathom level to drive west of Daubuz's shaft by six men at £10 per fathom. Lode worth £13 per fathom. In our tribute department we have 40 pitches working by 120 men, on tributes varying from 9s. 6d. to 13s. 4d. in the £, the standard for tin being £36 per ton.—William Hooper, John Opie, Richard Williams, William Henry Richards.

WEARDALE.—Report on Weardale Company's mines for week ending March 16: Groverake, Adamson's drift west shows no change, end worth 14 cwts. per fathom. All other work suspended.—Bollihurn, Watt's level south flat stopes worth 30, 40, 36, 34, 24, 30, and 24 cwts. per fathom. Stope in vein worth 24 cwts. per fathom.—Greenlaws, Watson's drift, vein 4 feet wide, coarse, composed of spar, stone, and rider, mixed with a little ore, but not to value. Lowe's drift, Race's drift west from Walton's rise, drifting in plate under slatey hazel, vein composed of douk and spar stringers.—Sedling. Driving 64 level east vein 3 feet wide of fluor spar and ore, very firm ground, end worth 14 cwts. per fathom. Driving 64 level west in plate, vein composed of spar threads and a little ore. Opening 56 fathom level, 149 fathoms end from drawing shaft; level nearly closed at present. Ore raised for week 16 tons, ore dressed for week 32 tons. No ore smelted.

WHEAL AGAR.—Redruth, March 21: We regret to state that the 18 inch H-piece at the 195 fathom level, which broke some time since, notwithstanding our efforts on bracing it in every possible manner, It has since Saturday last become so bad that it necessitates its being replaced by a new one, which has to be cast in a peculiar form in order to meet the contracted part of the shaft through which it to pass. In consequence of this breakage the engine has been idle at times, consequently the dressing machinery could not work for want of water. This is the reason for the small sampling of tin for this fortnight, not from any falling-off in the mine, which we are pleased to say is improving, more especially in the eastern section. We hope in the course of a few days to have all things in proper order, by so doing more than make up for this seeming loss.—William Hambly, R. Daniel. M. D. Penhale.

COLONIAL, INDIAN, AND FOREIGN MINES.

ALAMILLOS.—Mine report dated 13th March. In the 85 fathom level driving west of Taylor's engine shaft the lode is small and unproductive. The 160 west of the same shaft. Carillo's winze being on another part of the lode the men are put to crosscut under it. The 100 fathoms level east of Judd's engine shaft has a better appearance.

DON PEDRO.—Maquiné Mine, half monthly report, February 13: The sinking of the shaft is being carried on with better results than when last reported, the ground has become more compact, and more water is issuing from the face; also as the sinking advances, the upper levels are becoming drained, which we consider very satisfactory. We are now preparing to fix a set 9 fathoms below the 60 horizon. This will leave 6 fathoms to reach the 75 horizon, and from the promising appearance to-day we hope to reach the 75 horizon about the end of May. The 75 fathom crosscut to the lode will then be started, and at the same time the south shaft, which is now 3 fathoms under the 60, will be resumed, and will be sunk comparatively dry, therefore the two last-named places will be carried on simultaneously.—Gold raising. More force is employed on this work for the present month, and a larger tonnage will be extracted. The mineral for this part of the month has been extracted chiefly from stopes west of the 50 north on the Canoa and underlie lodes north of the old excavation met with at this place. We have a large body of mineral standing, and although the quality is of a rather low standard, it pays well at the reduction. We have one stope on the underlie; this has been carried on westward. The lode is well defined, and of moderate quality.—New stamps. We have masons preparing stone for this work, also carpenters preparing timber for the wheel, but we regret to say the work is very slow, owing to the very wet season we are having, which made work slow at surface. The stamps are very much required, as the output of mineral is much increased from the mine, and our present stamp cannot dispose of the rough mineral, therefore every effort will be made to push on this important work.

FORTUNA.—Mine report dated March 13: Canada Incosa mine. In 110 fathoms level driving west of San Pedro's shaft the lode continues regular and compact, and is estimated at ¾ ton per fathom.—Los Salidos Mine The lode in the 200 fathoms level driving east of Taylor's engine shaft has improved in value, and has a kindly appearance, and is now estimated at ¾ ton per fathom. In the 105 east of Palgrave's shaft the lode turns out stones of ore occasionally. No change of importance has taken place in the stopes since last reported.—Surface works. These are kept on with great regularity, and the machinery is in good working order. Estimated raisings for March, 225 tons. Tributers' returns. These amounted in the past month to 72¾ tons of mineral.

KLERKSDORP.—Extract from Manager, dated Feb. 23: Smaller Mynpacht.—I have been able to give more time to this during the past week, and though little work has been done, I consider the ground very valuable. Many here point out the Buffelsdoorn reef on the property, and I am much inclined to prove it, as the indications are certainly most favourable.

LA YESCA.—Mr. Winwood-Smith reports on February 20: San Miguel. Driven during last week 5 feet 2 inches. Rock very hard. A large quantity of water.—El Despacho and La Garita. I am stoping in both places. The assays from average samples taken from each were as follows:—El Despacho, 291 ounces; La Garita, 342 ounces. The result greatly exceeded my expectations, and I am certain that the mine will prove most profitable. On the 26th February, he states: I hope to keep the mill and mines going night and day. I can only repeat that I have the greatest faith in the mine, and feel sure that within one month I shall cable you returns. On the 7th March, he cabled: "Machinery complete in every way, now producing large quantities of rich ore.

LINARES.—Mine report dated March 13: Pozo Ancho Mine. In the 200 fathom level driving south of Peill's engine shaft, the men are doing good duty, and are carrying on the work very satisfactorily. The lode in the 200 west of the same shaft is small and without value. In the 155 west the lode continues unproductive. The lode in the 178 west of Warne's crosscut is large and open, and looks very kindly, and is valued at 1½ ton per fathom. No. 277 winze, sinking below the 155 fathom level.—The lode continues very productive, and is estimated at 2 tons per fathom.—Los Quinientos Mine. Taylor's Engine Shaft.—In the 185 east the lode has improved in value and looks promising; valued at 1 ton per fathom. The lode in the 165 east is not quite so open but produces stones of ore; estimated at ½ ton per fathom. In the 150 east the lode is regular and well formed, but is of no actual value. The 130 east.—We have met with nothing of value in this driving. Vicente's winze sinking below the 150 fathoms level. This is going down through a very wide and strong lode, valued at 1½ ton per fathom.

NEW ST. AUGUSTINE.—Extract from a letter from Mr. A. Bruce Brand, C.E., dated Kimberley, February 25:—To-day we had a trial wash of comparatively clean yellow—280 loads yielding 33½ carats—about 100 loads of hard yellow lumps yet to be treated, will probably increase the yield to 40 carats. The paddock is now 42 feet deep from the original surface of the mine, and the ground continues to look most promising.

PESTARENA.—Mid-monthly report:—Ends. In the 55 east, on No. 1 lode, the lode is 40 centimetres wide, consisting of quartz and pyrites, while its value is estimated at 4 tons of 3-ounce ore per fathom. The branch in the 90 west, on No. 1 lode, is still small, and at present mixed throughout with veins of quartz. It carries nothing to value. The lode in the 140 west, on No. 5 lode, shows signs of improvement, a little ore having come in on the footwall, but at present it is in a disturbed condition. There is nothing to value.—Crosscut. No change has occurred in the 70 north, which still remains in hard, compact schist. Stopes continue to produce their usual quantity and quality of ore. The intermediate over 90 east on No. 1 lode has been suspended, and a stope commenced which will improve in height. None of the "work suspended" has yet been resumed, the scarcity of water being still very marked.—Stabioli Mine. Nothing of importance has been met with in the crosscut west from Morghen adit, while the lode in the Anza level north exhibits no change.—Kirt concession. Both the Oro Secco end west and Goja adit remain the same as last reported on the 4th inst. Machinery continues to work satisfactorily, but in the case of the hoisting and crushing machines at reduced speed.—Transport of milling stone. Was successfully accomplished and finished on the 6th inst. (Signed), W. Henwood Trelease.

TERRIBLE COLLIERY EXPLOSION IN AMERICA.—A terrible explosion occurred at the Rocky Mountain Coal Mine, at Red Canon, Evanston, Wyoming, resulting, it is feared, in the loss of 68 lives. The slopes from the entrances to the lower workings have been blocked by wreckage, and it is thought three days will elapse before exploring parties, which have been organised, will be able to reach the bodies. The explosion, which was felt for miles around, wrecked the engine-room and other buildings, and caused great damage. It is stated that the mine was free from gas and well ventilated, and the cause of the explosion is supposed to have been the ignition of dust by a blast.

"AUSTRALIAN GOLD FIELDS."—We have received the March copy of this publication, which is compiled and published by Mr. F. G. McCutcheon, of 5, Lothbury, E.C. It contains some very useful information, statistical and otherwise, respecting the various Australian gold fields and mining companies, giving an account of the progress up to date.

BAYLEY'S REWARD No. 1 SOUTH.—Mining report, dated January 28: Main shaft. Main shaft (Gorrie's) sunk 4 feet, total 164 feet from surface. Lode still continues as usual. Water about 1600 gallons per day.—Stopes. In the stopes there is little or no change to report. The stone being raised is apparently of fair grade.—Mullock shaft. Mullock shaft has been sunk 7 feet, and connected with the stopes from the main drive; it will now be used for the purpose of filling up the workings as the stone is removed.—No. 2 shaft, Bayley's line. Contractors have sunk 3 feet, total 141 feet. Water continues about the same—1300 gallons per 24 hours.—Machinery. Work necessary towards finishing the plant is being continued, also the erection of the office, which will also be used as a private store-room.—Stone crushed. Since the last cleaning up there has been crushed 102 tons of stone. The usual cleaning up will take place the latter end of next week.—Water. Fresh water for the boiler is getting very short—probably not more than two days' supply. We will then have to, if possible, make arrangements with some one to supply us—probably from the Government tanks—with what will be required.—Gold dispatched. As advised by telegraph on the 27th, there was dispatched 294 ounces 16 dwts. of bar gold.—(Signed) W. H. Matthews, manager.

BAYLEY'S REWARD CLAIM.—Mining report, dated January 28: Sylvester shaft has for the week been sunk a further depth of 5 feet, total now being 351 feet, or 71 feet from the chamber.—100 feet stopes. 1 0 feet stopes yielding fair battery stone; lode from 3 feet to 5 feet wide.—Gordon shaft. Stopes at the No. 1 intermediate are returning fair stone, which is being passed through the battery the same as the 100 feet stopes.—South drive. South drive at the 50 feet level has been driven 12 feet; full length, 164 feet from shaft. Lode is at present small, being 15 inches wide. Will now prepare for stoping from this point back to the old stopes north.—Begelhole shaft. During the week have been engaged filling the workings, from which the stone has been removed, with debris from the surface. Cockshott shaft sunk 6 feet, total 82 feet. Lode still continues its usual course, fully 4 feet wide. Sinking for the time being will be suspended.—Everard shaft. North drive has been advanced 5 feet; total, 238 feet from shaft. Apparently have now got to the end of the stone, face being in mullock. Work here will also be suspended for the present.—Rise. Rise from the back of the north drive is at present 43 feet above the level; lode fully 9 feet wide, and of a most promising nature.—Stopes. Stopes are yielding similar class of stone to that reported last week and of similar size.—Air shaft. The north drive has been driven 4 feet, total 30 feet from shaft. Lode slightly increasing in size, being about 2 feet wide, which will probably increase as we continue north.—Drains. Work in connection with the drains to improve the catchment for the dam is being continued, and will shortly be completed.—Poppet heads. In connection with this there has been a good deal left undone, such as flooring the landing brace, fixing the necessary timbers and pulleys, and other work. This I have now started to complete, and will get it finished as rapidly as possible in order to get the double cage at work.—Stone crushed. During the week there have been crushed 142 tons of stone taken from the ore dumps and the stopes, Sylvester, Gordon, and Everard shafts, also a little from Cockshott, yield being 220 ounces of gold.

CHIAPAS.—Mine report for fortnight ending February 14: Providencia Aver rise. New rise commenced some 170 feet into Aver level. Risen 14 feet. Ore streak widened to about 18 inches. Sorting out and sending to mill. Assay of whole width 6 feet as broken, 2 dwts. gold, 3 ounces 10 dwts. silver, 1 per cent. copper.—Providencia South Hill Prospecting drift crosscut. Put in crosscut eastward near face of drift, driven 10 feet 6 inches. Struck trachyte rock, now continuing again in face of drift.—Taylor main extension. Driven 3 feet, total 597 feet. Still in same kind of rock, which continues to carry small traces of silver 7 dwts.—Santa Fe Hill No. 3. Driven 4 feet, total 46 feet. No change.—Crosscut Arciga drift. Driven 30 feet, total 69 feet. Passed out of wollastonite formation into broken quartzose garnet formation.—Sylvia crosscut. Driven 22 feet, total 82 feet. Driven into wollastonite formation, leaving igneous rock behind, occasional spots of bornite.—Santa Fe winze. Pump station cut, putting in ladder-ways.—Extraction. Old Providencia. Extracted, 371 tons. Not quite up to its usual high grade appearance. Assay 14 dwts. gold, 9 ounces 14 dwts. silver, 4·39 per cent. copper.—Taylor No. 3. Extracted, 25 tons. Assays 7 dwts. 12 grains gold, 6 ounces 4 dwts. silver, 2·51 per cent. copper. Looking generally poorer. We have both pumps now continuously going, and during the past fortnight have had two rock drills continuously at work, with a third occasionally going. In Santa Fe winze we are making preparations to get a hoist at work some time next month, when we shall push forward two new drifts vigorously with rock drills, and also continue the one already commenced. One new drift to be driven in the direction of Providencia main, we shall name Pine Creek No. 1, and the other other in the direction of charcoal house, Pine Creek No. 2.

CARRINGTON.—Mr. Alan B. Bright writes as follows by the mail just received:—Letter dated January 26: The reef in the No. 1 south lease has improved in appearance; as there is more mineral in the stone it is being put into the paddock. The Victoria, in a week or so, intend to drive on their new footwall reef towards the Carrington lease. As far as I can learn, this reef is trending north-west and south-east, and dipping east-north-east, so that if it continues it will go right through this company's ground, and the prospects of our property will be greatly enhanced.—Letter dated February 2: The Victoria footwall reef is looking remarkably well. From its appearance I feel confident that it is permanent, and that it will trend through our lease.

GOLCONDA.—A circular says:—Your directors are pleased to be able to state that the battery has now been erected, and a cable is expected at an early date, stating when crushing will commence. While attending to surface preparations and buildings, Mr. Benson did not lose sight of the necessity for developing the mine as far as possible, so that ore sufficient to keep battery continuously at work when once started should be raised. There must now be considerably over 1000 tons of ore at grass ready for crushing. With regard to the question of water, this has stopped the sinking of the new main shaft at 73 feet, but in a short time the pumps will be at work here, and sinking continued. For battery and boiler purposes we have an unlimited supply of water, which, not being absolutely fresh, will be passed through condensers. The manager's cable of 23rd February also mentions the desire to acquire a fresh-water well, and this the board have cabled him to effect, for domestic purposes principally. It is satisfactory to note that in driving on the 44 feet level north, though in letter of 6th January Mr. Benson states, the ore does not assay quite up to formerly; the reef continues to increase in size; and by cable on 23rd February, we have the news that there is a considerable improvement driving north, which is still further confirmed by cable advice of 13th inst. The south drive on the same level has shown good stone right along. It is evident that as development is proceeded with, the more promising the mine is looking, and we have every reason to look for still better things in future.

GOLDEN GATE.—The manager, under date January 26, writes as follows: The diamond drill is now boring in country of the most favourable character for carrying a reef, and although we are a great depth we are not quite deep enough to cut the reef which the Bonnie Dundee has recently discovered, and I think there is a very good probability of cutting a payable reef. 5000 forfeited shares in the No. 7 Queen were sold during the week up to 1s. 6d. on the strength of the prospects of the bore. The Charters Towers Stock Exchange has asked for particulars to enable them to call the company's shares on 'Change. I have given them the necessary particulars, and shares have been quoted. There are buyers at 2s. 6d. This is also in consequence of what is considered the favourable prospects of the bore.

HARQUAHALA.—Copy of Mr. Robert M. Raymond's report for the month of February: Mining department, Bonanza group, ore breaking. Iron vein south, above 1st level This stope, near the Iron shaft, has produced 370 tons of ore during the month, averaging from $5 to $6 per ton.—Iron vein south, above 5th level. 210 tons of ore have been taken from the most southerly developments in this ground, averaging $5 per ton. The vein at the south end has become too small and low grade to pay, and the existence of more ore farther south on this vein is very doubtful.—Iron vein, 6th level. Underhand stope. This stope has been continued along under No. 5 crosscut of the 6th level, and 205 tons of ore mined, averaging $10 per ton.—Porphyry contact, 3rd level, near main shaft. The ore body opened up here has yielded 170 tons of $8 ore.—Porphyry contact west. The ore body struck here has yielded 130 tons during the month, averaging about $12 per ton.—Doherty vein pillar 4th level. 620 tons of ore has been broken from here, averaging from $10 to $12.—Doherty vein, old stopes south end. 120 tons of broken ore have been drawn from here, averaging $4.—Discovery vein, stope No. 2. This furnished 100 tons of $5 ore, which completed this stope.—Discovery vein, 4th level, south end. A few bunches of good ore were mined here, but nothing extensive was found.—Prospecting department. Iron vein, above 1st level. A crosscut has been run from the 1st level 50 feet south-east under the old stopes, which renders considerable good ore in pillars accessible, and also the ground opened up in the east end of the old stopes.—Porphyry contact, east.—No. 1 crosscut, 5th level. This has been advanced 31 feet, making a total of 180 feet. Favourable indications have been found and traces of gold, but nothing of value. A raise of 30 feet was made near the heading, and a drift from that of 20 feet on some stringers, but without encountering anything.—Crosscut east from 4th level. This has been advanced 32 feet, making a total of 60 feet. No vein or stringers parallel with the discovery vein were found. We have turned off to the contact about 18 feet, and will drive east along that, confining the developments east to this level and drift.—Porphyry contact, south. No. 3 crosscut from 5th level This has been advanced 109 feet, making a total of 235 feet. This crosscut has been cut through the porphyry, and the last 60 feet is in quartzite, showing traces of gold. This ground will be thoroughly developed, as it is a favourable one for new ore bodies.—No. 5 crosscut from 5th level. This has been started 200 feet from the former, and will run south parallel with it. It has been advanced 29 feet, a total of 88 feet from the 5th level.—Porphyry contact, west. The drift from the head of the porphyry stope has been advanced 22 feet, a total of 115 feet. This cuts across the ore body found here, and stoping is now being carried on.—From the foot of the Porphyry stope the drift has been advanced 39 feet, a total of 124 feet. The heading shows a little gold and favourable indications.—Golden Eagle group. No 2 winze. Ore breaking has been carried on here during the month on each side of the winze. The ore body is from 2 to 3 feet in width, varying from 7 to $15 in value.—No 1 winze. This has been sunk 49 feet, a total depth of 154 feet. Nothing of value has been found in it, though, on account of the flattening of the porphyry we have been cutting into this rather than into the quartzite.—North drift. Developments this month have opened up an ore body 50 feet in length, averaging $8 to $12. Stringers led off about 100 feet north into the hanging wall, and the ore lays somewhat parallel with the drift. A winze will be started on this very soon.—Milling department. The mill has run steadily during the month, the total service being 27½ days. The ore handled and the returns have been as follows:—On hand February 1, 482 tons; mined and hoisted—Bonanza, 1897 tons; mined and hoisted—Golden Eagle, 478 tons; total, 2857; milled during the month, 2600 tons; on hand March 1, 1895, 257 tons; bullion produced, 1213 ounces, valued at $19,200; profits, general store, $500; total revenue, $20,000; expenses on revenue account, $15,900; net profit (or, at 4·90 to £ sterling, equals £836), $4100. Preparations for a 150 ton cyanide plant are being made for the treatment of the tailing beds, which contain about 80,000 tons. The material will be on hand by the end of the month, and the erection of the plant will speedily follow.

JAVALI.—The directors have received a report from their manager, dated December 23:—"Mill report: 10 stamps worked on an average of 21 days, crushing 380 tons of ore, which yielded 110 ounces of gold, and from the arrastas 25 ounces; total 135 ounces of gold, or an average of 7 dwts. 2 grains per ton. The cost was £283. The gold is valued at £370 4s."

KINSELLA.—Extract from Mr. F. W. Grey's letter dated 7th February; The mine. We have done part of the timbering of main shaft, and for the last few days have been driving back south from the Nil Desperandum south shaft towards main shaft. We have not made much progress, as we have been stripping down the back and making the level bigger, but I am pleased to tell you that we have broken some remarkably good stone during the progress of the work, some of it really specimen stone, and as it comes from a 6-foot reef it augurs well for the future. We shall push on with the driving of this level and with the sinking of main shaft in spite of the exemption; at least, that seems to me the best course to adopt, though, after all, that is a matter which Mr. Hewitson will decide.

MOUNT LYELL.—The London board have received the following report from the Melbourne board for the week ending January 30: Indicator winze, No. 3 tunnel. The winze has been sunk 3 feet, total 65 feet. There is no change to report.—North drive, No. 3 tunnel. This drive has been advanced 5 feet, total 22 feet. Still driving in baryta rock, showing specks of fahlore.—No. 2 shaft, No. 4 tunnel. Sufficient ground has been cut out at the back of the chamber to allow of the truck road to the north drive being laid. We are now putting in the engine.—North drive, No. 4 tunnel. The north drive is in a total length of 42 feet; following the pyrites wall. The country is schist and baryta.—No. 1 rise south drive, 50 feet level engine shaft, No. 4 tunnel. The contractors have put up the rise a further height of 2 feet, total 15 feet. The country is somewhat harder and more difficult to break.—No. 1 winze, No. 2 crosscut, 75 feet level engine shaft, No. 4 tunnel. The winze has been sunk 2 feet 6 inches, total 10 feet 6 inches. The rock is intensely hard, and makes the progress slow.—North drive, 100 feet level engine shaft, No. 4 tunnel. The north drive has been advanced 4 feet, total 90 feet. There is more galena showing in the pyrites, and the assay value is slightly improved.—No. 5 tunnel. The contractors have driven 10 feet for the week, total 976 feet. The country is conglomerate and schist; good ground for breaking.—Abt siding. In progress for three chains, clearing completed for 25 chains, and tenders called for bridge over Queen river.—Through tram. In progress from 70 chains to 20 chains. Have had to do a good deal of shooting on account of rock. Bridge at 65 chains ready for erection. Expect to complete earthworks on this line by end of February, weather permitting.—Brick tram. Platelaying completed, and trucks running with logs to mill.—Sawmill. Commenced sawing last Monday, breaking down logs, and everything running well.—Brick plant. Completed whole plant to-day, smart progress has been made. Will commence building kilns at once. Water supply connected to boiler and all plant running well. Clearing of the various sites of roasting stalls, smelter and crusher buildings progressing well.—Bank engine water supply. Race completed for 20 chains, and reservoir started.—Telephone. Instrument fixed; expect to connect with mine on Saturday.—Lime kiln. Charging tram finished, and foundations of kiln commenced.

MOUNT ZEEHAN (Tasmania).—Manager reports for week ending February 5: Argent section, main engine shaft, No. 4 lode. No. 2 rise south has been holed through to winze from No. 1 level. Height from sole to sole, 64 feet. Will open stope south of rise, where lode is 1 foot 4 inches wide, carrying a little second class ore.—Silver Queen section, No. 8 lode. Winze has been sunk 7 feet, total 47 feet. No change to report. No. 1 level north extended 3 feet, total 50 feet.—Machinery. Two and a-half days were lost owing to accident to pumping plant. Concentrator is engaged crushing for Zeehan-Montana Company.

NEW RIETFONTEIN.—From the report for January: Profit, £629 17s. 6d. Expenditure on account of capital, £1436 5s. 10d.—Mine. No. 1 shaft was sunk to a depth of 187 feet. The sinking has been slow owing to the quantity of water encountered. A crosscut will be put in at the above depth to connect up with the 2nd level of No. 2 shaft.—No. 2 shaft, 7th level. At a distance of 148 feet, the middle reef was intersected, and, as struck on the 6th level, the reef is poor where cut. An east drive has been started, and is now in 36 feet, and it is expected to strike the rich chute at a distance of 100 feet from the shaft. It is also the intention of the management to drive west at this level. The reefs in the stopes on the upper levels have, during the greater portion of the month, not been as good as heretofore, hence the falling off in the output, but lately a considerable improvement has taken place.—No. 7 shaft. About 30 per cent. of the ore crushed has been taken from the north reef, 3rd level, the fire assays being about 12 dwts. over a stoping width of 2 feet 6 inches.—Mill. About 1000 tons of rock has been sorted out. It is anticipated that rich ore can be extracted from the 7th level, No. 2 shaft, in about two months' time. In the meanwhile there is an ample supply of rock for the mill on the upper levels.

ROSENBLOCK.—The resident engineer reports, under date of 23rd February, that the work is well progressing with the shaft, which was then down to over 30 feet. The buildings for men's quarters, dynamite magazine, and Kaffir compounds were all but completed.

NEW QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, February 1:—I beg to submit my report on work done in your mine during the past fortnight: No. 3a south level. This stope shows very little improvement for the fortnight, the reef is very small and the ground hard. The No. 2 north level is being formed along the face of these stopes. No. 4 south level. Stoping has been carried on on the footwall vein, the work being principally confined to holing through to the No. 3 pass over this level. At a distance of about 70 feet up the pass we expect to break through next week; reef varies from 3 to 10 inches. No. 5a south level. Stoping has been carried on over this level, the reef varying from 6 inches to 1 foot.—No 1a underlie, Stoping has been carried on in the south level, the reef varying from a leader to 1 foot. The No. 1a northern level has been formed for a distance of 40 feet, and by the end of next fortnight we should be able to resume the drive of this level.—No. 4 formation, No. 2 north level has been extended a further distance of 25 feet, making a distance of 167 feet from underlie shaft. The reef during the fortnight has been small in the distance driven, but show an improvement in the face to-day, being of an average of 9 inches. Stoping has also been carried on, the reef in the stopes not averaging more than 3 inches, but I think it will improve as the stopes rise. No. 2 south level has been advanced a further distance of 14 feet, making 77 feet from the underlie shaft, the reef averaging about 6 inches.—Quantity of stuff raised during the fortnight. No. 1a underlie north and south levels 120 trucks, No. 3a south level 6, No. 4 south level 39, No. 5a south level 25, No. 4 formation 134, total 384 trucks. (Signed) W. Henderson, manager.

No. 7 NORTH-EAST QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, Feb. 1:—According to instructions, the boiler has been thoroughly cleaned and tested, also the flues have been cleaned and steam got up again to commence working below.—Friday, the 25th ult. All the machinery is now in good working order. On the 28th January Balch and party commenced working the block lately worked by Parry and party, but to-day they have given it up, the stone having cut out; and now they have taken a block on the western side of the shaft below No. 3 level, on which they will start to-morrow. Tuckett and party are still rising at the back of No. 3 level east on a reef nearly 5 feet thick; some of this is nice-looking mineral stone. Mills and party have taken a block of ground above the No. 2 level east, and are driving on a reef 8 inches thick, of good stone. We have hauled for the fortnight 26 tons of quartz.—(Signed) J. T. L. Williams.

RHODESIAN MINING AND FINANCE.—The acting manager in South Africa, writing from Buluwayo on the 30th January, stated as follows in regard to the company's Adventurer reef (40 claims) in the Umchingwe district:—"From the 50 feet level I have extracted about 20 lbs. of the ore with my own hands from the whole width of the reef (averaging about 4 feet 6 inches in width), which ore I am forwarding to you to-day per parcels post. Whatever results you may obtain you can take as a complete and accurate test of the value of the ore." The samples of ore referred to duly arrived in two bags, marked 9 and 10, each containing about 10 lbs. weight of ore, and these were sent to Messrs. Johnson, Matthey, and Co., Hatton Garden, E.C., to be assayed. Their certificate reads as under:—"Certificate of assay, 18th March, 1895: For the Rhodesian Mining and Finance Company (Limited). We have assayed the samples of mineral as under, and find the following to be the result:—No. 9. Produce of gold, 3 ounces 12 grains; No. 10, ditto, 3 ounces 11 dwts. per ton of 2240 lbs. of mineral.—(Signed) Johnson, Matthey, and Co. (Limited)." On the 13th instant the following cablegram arrived:—"At 70 feet level Adventurer's reef—Umchingwe—just the same."

QUEEN CROSS REEF.—Manager's report for fortnight ending January 22: Since my last report the contractors, Pugh and party, have driven No. 1 level north 8 feet, and finished their contract, total distance in from the shaft 88 feet. I started them on wages on Monday morning to crosscut in to the footwall to find the reef we left under foot. We cut a small formation coming down from the hanging wall, carrying a small leader; but we don't know yet if it is the formation of the reef we left overhead, or if it is over us yet. The tributors are all doing fairly well. Everything in connection with the mine is in good working order.

SOUTH AUSTRALIAN PETROLEUM.—The manager reports to the directors by the last mail as follows:—We have good news to write you this time. Our No. 87 that we struck out on the east part of our grant is still holding out good. Our No. 82 is still holding out to 17 maunds a day. Our well No. 81 is still holding out good. This is the well where we struck our new lead on the same line that we operated on way north two years ago, where we met with good success, and we have struck two more new wells there—No. 87 and No. 91. No. 91 has been a big surprise to us, as we struck a pocket that is now yielding 10 maunds a day, and the well is only 105 feet deep, and has been yielding now for five days, and has all prospects of being a good producer. At our No. 90 that we were drilling by steam away in the south east corner of our territory, we have struck a splendid show of oil. There is 40 feet of oil in the well; this is located on the south-east corner of our grant, and when I wrote to you before I believed we were going to get large quantities of oil there. We struck this oil at 437 feet, and we met in the drill bore some rock at an angle of about 20°. Our prospects here have not been as good for one year and a half as they are now.

VICTORIA DISTRICT (MASHONALAND).—Mine manager's report of last mail: The pay shoot has been struck in No. 2 rise 2nd level and in No. 3 winze 3rd level. Samples sent for assay give the following results:—No. 2 rise 2nd level, 1 ounce 6 dwts. 12 grains fine gold per ton 2240 lbs.; No. 3 winze 3rd level, 1 ounce 12 dwts. 16 grains fine gold per ton 2240 lbs. The south drive 2nd level contains very little free gold, but a large amount of pyrites; assay results give 2 dwts. 14 grains fine gold. Mr. Wrey (consulting engineer) adds, I think we have here reached the southern limit of the shoot.

VICTORY (Charters Towers).—Mine manager's report dated January 26: No. 1 shaft. Winze on Pepuan reef at No. 11 level sunk 10 feet, total 200 feet; 8 inches of reef in bottom, poor quality. Drive going west extended 17 feet, total 40 feet; face shows 10 inches, poor quality stone. Stoping over drive east side of winze on Pepuan reef from 2 inches to 10 inches. The quality of stone has improved during the last few days, some of it being fairly well mineralised; raised 33 tons.—No. 2 shaft. Western drive at 320 feet level driven 30 feet, total 156 feet; no change. Cross drive east end driven 8 feet, total 18 feet. Have discontinued work here, as country not favourable for reef. The winze from No. 1a level sunk 13 feet, total 35 feet; have 2 feet of reef in bottom, but it is a bit broken up and mullocky. Stopes over this drive carry from 3 inches to 20 inches in fair-looking stone. Started driving from shaft 40 feet below No. 1a to intersect winze; 6 inches fair-looking stone showing in face; should hole through in about a fortnight. No. 6 level driven 15 feet, total 200 feet; no reef in face. This work is being done for ventilation. Reef in stopes over this drive small and nearly worked out. Working on a vein averaging 9 inches over No. 5 level, quality fair. In rise at bottom of underlie reef will average 18 inches for a length of 20 feet; the stone is fairly well mineralised. No. 7 level driven 14 feet, total from plant 160 feet; have a few inches of formation on footwall, but no reef; country hard, raised 85 tons.

ANGLO-MEXICAN.—Extracts from mine manager's advices, dated January 11: New Main tunnel. You will note that this work was advanced 28 feet during the week under review, making a total length to date of 1338 feet. Apart from the satisfactory progress noted, there is nothing of special interest to mention regarding this work.—San Nicolasito tunnel. During the past week connection was made between the tunnel and the winze of the same name, which will not only greatly facilitate the work in this part of the mine, but will also improve the ventilation very materially. Work will be continued in this part of the mine, and I will keep you advised of any developments that may take place.—Face of Guadalupe. This tunnel, as you will note, was advanced 4 feet during the past week. The face of the tunnel is in 5 feet, of promising-looking quartz, but is as yet still barren.—Drift north from air winze. This winze was advanced 8 feet during the week under review, making a total length to date of 12 feet. The face of the drift is in ore 4 feet in width, and looks well. Upraise No. 15 from No. 1 level was advanced 3 feet during the past week, making a total height to date of 11 feet. The face of the upraise is in good ore, and carries a vein of good width.—Upraise No. 12 from No. 1 level. This upraise was advanced rapidly during the week, having been pushed ahead 17 feet, making a total length to date of 52 feet. The face of this upraise, like No. 15, shows good ore and a vein of good average width.—Face of drift south No. 1 level. This drift has been started for the purpose of opening up and prospecting the ground to the south above the Guadalupe level. At present the face of the drift shows ore 3 feet in width, but the lode has not advanced far enough as yet to give us any definite idea of the ground in this direction.—Stopes. The ore extracted during the past week was taken from the Nos. 9, 11, 12, and 14 stopes, all of which continue to look well and to yield all the ore that is required for the mill.

BUFFELSDOORN ESTATE.—The secretary writes:—Latest mail reports from this property are indicative of great activity both on Buffelsdoorn Estate and in the immediate neighbourhood. The prospecting operations, which were undertaken directly the new working capital was supplied, have already led to the discovery of a new reef 160 feet south of the Buffels reef which had been hidden by an alluvial overlay of some thickness. This reef has been assayed at 9 dwts. where struck, and its position and characteristics go to support the theory which has been entertained for some time past—that the whole series of Witwatersrand reefs exist in the Klerksdorp district, and that the Buffels reef is identical with the north reef on the Rand. This recent discovery is not to be confounded with the prospecting operations which have been going on for some time past on the Rietfontein mynpacht at a distance of about a mile south of the Buffelsdoorn reef. These also have been most satisfactory in their results, the average of 10 assays taken at a depth of 35 feet being nearly 10 dwts. Heavy rains have retarded the development of the Buffels Mine to a certain extent; but the manager reports that there are now so many points of attack that no fear need be entertained of his ability to keep the additional stamps going from the moment they are dropped.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for the week ending February 6: Blackwood No. 1 shaft 150 feet level main north drive extended 11 feet, total length 155 feet, face showing blotches of lead ore. We picked out in driving 2 tons, assaying 37 per cent. lead and 3½ ounces silver per ton. Main south drive driven 16 feet, total length 136 feet, face in mullock of no value.—50 feet level. Have finished fixing tracks on this level.—Howell No. 2 shaft. 300 feet level main north drive lengthened 10 feet, making its total length 139 feet, face very mullocky. North-east drive extended 15 feet, total length 29 feet, face showing mixture of mullock and sulphides, but so far of no value.—Marsh No. 6 shaft, 2nd level. No. 2 east crosscut extended 4 feet, total length 37 feet, face showing mullock with small patch of sandstone on south side, which will be followed for a short distance. Uprise in end of south drive is showing some very fair grade carbonate ore. We mined 22 tons, averaging 23 per cent. lead and 29 ounces silver per ton.—Stopes down winze. The carbonate ore has now very nearly pinched out in the bottom. Will now rise higher up in the face to break ore. Are working in back of 2nd level, and have holed through to south stope off uprise. We have broken 2 tons, assaying 24 per cent. and 56 ounces, 10 tons, averaging 23 per cent. and 33 ounces, and 17 tons, averaging 21 per cent. lead and 21 ounces silver per ton.—Retallick's workings. Incline uprise on 115 feet level was risen 7 feet, making total height 30 feet and stopped, roof in mullock. We have started a winze in north drive (20 feet below 115 feet level) at a point about 60 feet in from winze, and have sunk same 7 feet through good grade ore. We broke 2 tons, averaging 46 per cent. lead and 34 ounces silver per ton. The assays for the week vary from 12·5 per cent. to 58 per cent. lead, and from 3·5 to 113·6 ounces silver per ton.

CARRINGTON.—Mr. Alan B. Bright writes by the mail just received, under date January 26: The reef in No. 1 south lease has improved in appearance. As there is more mineral in the stone, it is being put into the paddock. The Victoria in a week or so intend to drive on their new footwall towards the Carrington lease. As far as I can learn, this reef is trending north-west and south-east, and dipping east-north-east, so that if it continues, it will go right through this company's ground, and the prospects of our property will be greatly enhanced. Also under date February 2: The Victoria footwall reef is looking remarkably well. From its appearance I feel confident that it is permanent, and that it will trend through our lease.

COROMANDEL.—Superintendent's report for fortnight ending February 23: Prospect shaft. 500 feet crosscut west. This has been extended a further 26 feet 6 inches during the fortnight, and is now 336 feet from shaft. There is no change to report.—500 feet level north. This level is being driven through the dyke with the object of opening the new shoot seen in the 440, and every effort is being made to accelerate this important work. 40 feet have been driven during the fortnight, and we reckon that another 30 feet will carry us through the dyke. It will then require a crosscut east about 30 feet to intersect the lode.—440 south of crosscourse. This has been commenced during the fortnight and driven 30 feet. The vein of quartz, which was 1 foot wide at starting, has pinched to a mere wall in present end.—Rise back 440 feet west of dyke. Progress for fortnight by hand labour, 7 feet 3 inches. Lode 1 foot 6 inches wide, assay value 6 dwts. per ton. 440 feet north on new shoot driven since last report 35 feet, total length from crosscut 210 feet. The quartz has opened to 2 feet during the fortnight, but in the present end is only 6 inches wide, though of fair milling value. This drivage has been temporarily suspended, and the men put to rise in back of this level at a point 120 feet from crosscut. The lode at starting is 3 feet wide, and worth 1 ounce 10 dwts. of gold per ton. No. 2 rise back 440 feet on new shoot risen since last report 15 feet 6 inches, total 55 feet 6 inches. Lode 2 feet 6 inches wide, assaying 10 dwts. of gold per ton.—New trial shaft. Since last reported this shaft has been sunk 7 feet 8 inches, and is now 87 feet 8 inches from surface. The lode in bottom is 2 feet wide, and assays 3 dwts. 12 grains of gold per ton.—Milling. This has been proceeded without interruption, and the trial crushing will be completed on the 28th instant.

CRAVEN'S CALEDONIA.—The following fortnightly report has been received from the mine, dated Charters Towers, January 31: In the bottom level at the Victoria and Queen shafts I got the chamber finished, frame set in, and a straight road laid right into one of the hoppers, which is completed. I expect to have the ladder way and the other hopper finished in two or three days, and we will then be able to place all the men on stone. In the underhand stope from No. 9 level the reef averages about the same, and will average about 6 inches in the stopes over the level. The drive in the fault in No. 8 level has been extended a further distance of 20 feet, making 141 feet from starting point, and the ground is changing for the better. The haulage of quartz is 20 tons, making a total of 24 tons in the paddock. In the stopes over the eastern level, on the Victoria and Queen reef, the reef still averages about 10 inches, and we have raised about 30 tons, making a total of 246 tons towards the crushing which is going through at the Enterprise mill, and I expect to put through about 535 tons before we clean up.—(Signed) G. Cabassi.

CHAMPION REEF.—Fortnightly report of Captain James Rowe, superintendent, dated February 25: Garland's shaft. This has been sunk 3 feet 6 inches, total depth 859 feet 3 feet. Lode 5½ feet wide, assaying 1 ounce 18 dwts. 10 grains of gold per ton. The 840 feet level north of shaft has been driven 32 feet, total length 135 feet. Lode 3½ feet wide, assaying 2 ounces 8 dwts. of gold per ton. The 840 south driven 36 feet, total length 155 feet 6 inches. Lode 5½ feet wide, assaying 1 ounce 2 dwts. of gold per ton. The 740 feet level north of shaft driven 27 feet 9 inches, total length 360 feet. Lode 2 feet wide, assaying 1 ounce 6 dwts. of gold per ton. Rise in back of level risen 17 feet 9 inches, total height 47 feet 9 inches. Lode 2½ feet wide, assaying 1 ounce 18 dwts. of gold per ton. Winze below level sunk 15 feet 9 inches, total depth 26 feet 6 inches. Lode 4 feet wide, assaying 2 ounces 5 dwts. 6 grains of gold per ton. The 630 feet level north of west crosscut driven 19 feet, total length 517 feet. We are just about through the disordered ground, and have a small vein of quartz in end, yielding a trace of gold. Crosscut east of this level driven 5 feet 6 inches, total length 12 feet 6 inches. Not having met with anything of importance, we have suspended the driving of same. The 530 feet level north of west crosscut driven 24 feet, total length 984 feet 9 inches. Lode 2 feet wide, assaying 1 ounce 18 dwts. 12 grains of gold per ton. No. 6 rise in back of 440 north of west crosscut risen 9 feet, total height 98 feet 6 inches. This is communicated with 340 north of west crosscut.—Ribblesdale's shaft. The 540 feet level north of shaft has been driven 19 feet 6 inches, total length 390 feet 6 inches. Lode 2½ feet wide, assaying 1 ounce 15 dwts. of gold per ton. Crosscut east of this end to meet with middle part of fold has been driven 11 feet, total 11 feet. We have met with the middle part of fold, and find the lode 3 feet wide, assaying 2 ounces 16 grains of gold per ton. The 540 feet level south of crosscut east of 540 south of shaft has been driven 19 feet 6 inches, total length 22 feet 6 inches. Lode 6 inches wide, assaying 18 dwts. 6 grains of gold per ton. No. 2 crosscut west of 440 south of crosscut east of 440 south of shaft driven 28 feet 6 inches, total length 28 feet 6 inches. Nothing as yet met with. Winze below level sunk 14 feet 6 inches, total depth 48 feet 6 inches. Lode small, is now 6 inches wide, assaying 17 dwts. of gold per ton. Incline rise in back of level risen 20 feet, total height 132 feet 3 inches. Lode 2½ feet wide, assaying 15 dwts. of gold per ton. Incline winze below level sunk 19 feet, total depth 158 feet 9 inches. Lode 4½ feet wide, assaying 18 dwts. of gold per ton. No. 1 crosscut west of level driven 17 feet 3 inches, total length 42 feet 3 inches. This crosscut is being driven to meet with west part of lode, and to communicate with winze sunk below 340 feet level south of shaft. 440 feet level south of crosscut on middle part of lode driven 10 feet 6 inches, total length 10 feet 6 inches. Lode 2 feet wide, assaying 1 ounce 15 dwts. 2 grains of gold per ton. The 340 feet level north of crosscut east of 340 south of shaft on middle part of lode driven 3 feet, total length 126 feet. Lode 1 foot 3 inches wide, assaying 1 ounce 1 dwt. 8 grains of gold per ton. No. 2 winze below level sunk 8 feet, total depth 45 feet. Lode 3 feet wide, assaying 1 ounce 15 dwts. 6 grains of gold per ton. Incline winze below level on east part of lode sunk 24 feet, total depth 146 feet 6 inches. Lode 3½ feet wide, assaying 1 ounce 3 dwts. of gold per ton. The 240 feet level south of Garland's 240 north incline winze, and south of Ribblesdale's shaft, driven 22 feet, total length 58 feet. Lode 1 foot 3 inches wide, assaying 18 dwts. of gold per ton.—Carmichael's shaft. This has been sunk 9 feet, total depth below the 440 feet level 17 feet 9 inches. Lode 4½ feet wide, assaying 2 ounces 3 dwts. 10 grains of gold per ton. The 315 crosscut west of shaft driven 24 feet, total length 659 feet 6 inches. There is no change in the strata, which is hard and spare for driving.—Rowe's shaft. This has been sunk 8 feet, total depth below the 415 feet level 41 feet 6 inches. Lode 2 feet wide, assaying 2 ounces 19 dwts. 4 grains of gold per ton. The 415 feet level north of shaft driven 17 feet, total length 162 feet. Lode 1 foot wide, assaying 2 ounces 11 dwts. 4 grains of gold per ton. Winze below 415 south of shaft sunk 14 feet 6 inches, to al depth 51 feet 6 inches. Lode improved in size, is now 6 feet wide, assaying 1 ounce 18 dwts. 6 grains of gold per ton.—Machinery. This throughout the mine is in good working order.

GOLD FIELDS OF MYSORE.—Mine report for fortnight ending February 23: Oriental lode south shaft. We are making fairly good progress in cutting the bottom plat at the 380 feet level. The 380 feet level north of shaft has been driven 4 feet 6 inches, total length 268 feet 1 inch. Lode 3 feet wide, carrying 1 foot 4 inches of quartz on the footwall, assaying 1 ounce 5 dwts. 6 grains of gold per ton. The 380 feet level south has been driven 4 feet, total length 278 feet 2 inches. Lode 3½ feet wide, carrying 12 inches of quartz on the hanging wall, assaying 1 ounce 2 dwts. of gold per ton.—Middle shaft. We are making good progress in the retimbering of this shaft, and hope to complete same by end of month.—New compressor. We hope to start this to-morrow. We are fixing the necessary air pipes in south shaft to convey the air to the different levels.—Mill. I am pleased to state that the engine for this is now arriving on the mine, and no time will be lost in fixing same.

GOLD FIELDS OF MYSORE.—Fortnightly report on prospecting operations, dated February 27: West Balaghat block, No. 1 shaft. The 117 feet level north has been driven 2 feet 6 inches, total distance 152 feet. The lode is 1½ foot wide, giving only a trace of gold. The south level has been driven 2 feet 6 inches, total distance 133 feet 6 inches. The lode is 2 feet wide, assaying 8 dwts. 14 grains of gold per ton.—No. 2 shaft. The 100 feet level north has been driven 2 feet 9 inches, total distance 131 feet 11 inches. The lode is 1½ foot wide, assaying 1 ounce 8 dwts. 15 grains of gold per ton. The south level has been driven 3 feet 6 inches, total distance 143 feet 6 inches. The lode is 1 foot 3 inches wide, assaying 14 dwts. 12 grains of gold per ton.—No. 3 shaft. This has been sunk 3 feet 6 inches, total depth 148 feet 6 inches. The lode is 3 feet wide, carrying 1 foot 3 inches of quartz, assaying 17 dwts. 10 grains of gold per ton. The 117 feet level north has been driven 2 feet, total distance 67 feet. The lode is 1½ foot wide, assaying 4 dwts. 8 grains of gold per ton. The south level has been driven 4 feet 6 inches, total distance 146 feet 6 inches. The lode is 1 foot 3 inches wide, assaying 10 dwts. of gold per ton.—No. 4 shaft. The 148 feet level north has been driven 2 feet, total distance 55 feet. Lode still small (6 inches wide), assaying 1 ounce 2 dwts. of gold per ton. The south level has been driven 1 foot 6 inches, total distance 44 feet 9 inches. Lode 2 feet wide, assaying 15 dwts. 5 grains of gold per ton.—Road block, No. 3 shaft, north of No. 2. The level south from bottom of shaft has been driven 14 feet 9 inches, total distance 188 feet 6 inches. Lode 1 foot wide, assaying 14 dwts. 6 grains of gold per ton.—North shaft. The north level from bottom of shaft has been driven 7 feet, total distance 80 feet. Lode 15 inches wide, assaying 3 dwts. of gold per ton. The level south has been driven 6 feet 3 inches, total distance 94 feet 9 inches. The lode is 1 foot wide, assaying 2 dwts. 8 grains of gold per ton.

HARRIETVILLE.—Fortnightly report of Mr. T. G. Davey, superintendent, dated February 1: Mons Meg Mine. Crosscut west of south drive, 100 feet below tunnel D, advanced 23 feet, total 31 feet. We have reached and passed through the No. 3 fault, which is here about 35 feet from western wall of main lode. The intervening rock consists of slate and sandstone, with veins of quartz, which are fairly auriferous. Generally speaking, however, the stone is very poor. A chamber has been cut for water tank, and all is now ready to resume sinking of main winze below the 100 feet level under tunnel D. Indications point to a probable improvement in the nature of the lode as sinking proceeds.—Stopes. Lode in stope at level of tunnel D 8 feet wide, assaying 8 dwts. per ton. Lode in underhand stope at 290 feet level below tunnel J, 12 feet wide, but only 4 feet of it is payable, assaying 5 dwts. per ton. At the 240 feet level there only remains a small block of stone, assaying 10 dwts. per ton.—Saint Bernard Mine. Drive north of crosscut from lower tunnel on United Miners lode advanced 17 feet, total 49 feet. No improvement. Grimley's tunnel extended 22 feet. The debris continues to carry about 5 dwts. of gold per ton. The stope on the rich vein at the upper tunnel was very short, and soon led into the old workings. We are now crosscutting in an easterly direction, and hope to meet with a continuation of the same vein in what appears to be virgin country. Redpath's lode has been somewhat disappointing, the shoot being short, and a trial crushing of 8 tons yielding only 9 dwts. of gold per ton.

KANGARILLA.—Report from mine, February 12: Drive No. 2 south. The whole of the face of the drive being in ore, I took an average sample on the face with the following results:—Silver, 89 ounces 4 dwts. 10 grains; gold, a trace.—Check assay. Silver, 91 ounces 5 dwts. 6 grains; gold, a trace, giving an average yield of silver of 90 ounces 4 dwts. 20 grains.—Furnace. During the past week a great amount of work has been done.

KEMPINKOTE.—Fortnightly report of Captain D. H. Williams, mine agent, dated January 25: Garland's shaft has been sunk 9 feet, total depth from surface 230 feet 6 inches. There is no alteration in the ground in the bottom of the shaft. 245 crosscut east has been driven 7 feet 6 inches, total distance from shaft 128 feet. The ground in the end is pure schist. 245 north drive has been driven 30 feet, total distance from main crosscut 79 feet. The footwall continues, we are carrying about 5 feet of the lode, value 1 dwt. 7 grains of gold per ton. 245 south drive has been driven 21 feet 8 inches, total distance from main crosscut 51 feet 8 inches. About 46 feet from main crosscut we again met with the footwall running west of south. At present we are driving upon this, and in the above direction carrying about 5 feet of the lode value 1 dwt. 7 grains of gold per ton. Henty's shaft has been sunk 5 feet 9 inches, total depth from surface 275 feet 3 inches. The ground in the bottom of shaft is still hard, with a few stringers of quartz running through it. 258 crosscut east has been driven 39 feet 3 inches, total distance from shaft 129 feet 3 inches. About 90 feet from shaft we met with a hard schist with stringers of quartz running through it, and parts of it looking like lode matter, it carried a few colours of gold. After passing through about 7 feet of this the crosscut again entered a soft blue schist; this continued until within 1 foot to the present end, when the end entered a hard black country rock. 173 north drive has been driven 4 feet 9 inches, total distance from shaft 50 feet 9 inches. The lode in the end is looking a shade better than it has been, value 2 dwts. of gold per ton.—Madihulli Block. About 500 feet north of the southern boundary line and about midway between east and west boundary line we have made a trench 29 feet long, 9 feet deep, and 3 feet wide in old workings. About 9 feet south of the above we have sunk a shaft 30 feet from surface. Having met with water we are obliged to suspend sinking, and the shaft becoming dangerous we are now securing it by timber.—Machinery. Our surface machinery and pitwork are all in good working order.

MOSMAN GOLD MINES.—Mine manager's report for the fortnight ending February 2: North Australian Mine. Byerley north, reef 6 inches to 12 inches, some fairly good, other poor. Byerley level south, reef 2 inches to 8 inches, medium quality. Lucknow level, reef 3 inches, of good quality. Intermediate level, total length 40 feet. Reef 4 inches, on which stoping has been started.—Wyndham Mine. Shaft underlie sunk 16 feet, total below 13 level 58 feet; 2 feet quartz on south side, and half way across. Stone white, with mineral in patches. Water troublesome. 13 level north, length 335 feet. Reef 18 inches, white stone. 12 level north, No. 3 winze 88 feet deep, no stone.—9 level south. The stopes adjoining the Rainbow level and tribute are turning out very well. Reef 6 inches to 2 feet, worth (say) 4 ounces per ton.—Peabody Mine. Shaft underlie, total depth 46 feet. Water troublesome.

OOREGUM.—Superintendent's report fortnight ending Feb. 26: Taylor's shaft sunk 11 feet 3 inches, total depth below the 660 feet level 62 feet 9 inches. Lode 2 feet 6 inches wide, assay value 5 ounces 17 dwts. 18 grains. The 660 feet level south driven 20 feet, total 95 feet. Lode 3 feet 6 inches wide, value 2 ounces 14 dwts. 10 grains. The 560 feet level south driven 32 feet 9 inches, total 367 feet 9 inches. Lode 2 feet 6 inches wide, value 1 ounce 17 grains. No. 1 winze 560 feet level south sunk 6 feet 6 inches, total 86 feet. Lode 2 feet wide, value 1 ounce 1 dwt. 19 grains. No. 2 winze, 560 feet level south sunk 9 feet 3 inches, total 20 feet 9 inches. Lode 3 feet 6 inches wide, value 1 ounce 3 dwts. 22 grains. No. 3 winze 460 feet level south sunk 9 feet, total 90 feet 6 inches. Lode 3 feet wide, value 1 ounce 2 dwts. No. 4 winze, 460 feet level south sunk 2 feet, total 52 feet. Lode 2 feet 6 inches wide, value 15 dwts. 21 grains. The level north from back of No. 4 rise, 280 feet level south, driven 10 feet, total 71 feet. Lode 9 inches wide, value 19 dwts. 19 grains. Wallroth's shaft sunk 13 feet, total 994 feet 6 inches. Lode 3 feet 6 inches wide. In the bottom of shaft the lode is split by a horse of ground. The part near the hanging-wall being 2 feet wide and the part in the footwall 1 foot 6 inches wide, average assay value 8 dwts. 17 grains. We regard this divergence as temporary, believing the two will again come together. The 960 feet level south driven 17 feet, total 29 feet 3 inches. Lode 1 foot 6 inches wide, value 6 dwts. 12 grains. The 960 feet level north driven 16 feet 3 inches, total 27 6 inches. Lode 1 foot wide, value 4 dwts. 8 grains. The 860 feet level south driven 31 feet 6 inches, total 312 feet 6 inches. Lode 1 foot wide, value 8 dwts. 17 grains. No. 1 winze 860 feet level south sunk 6 feet 9 inches, total 67 feet 6 inches. Lode 1 foot wide, value 7 dwts. 15 grains. The 860 feet level north driven 18 feet, total 187 feet 6 inches. Lode very small, value 4 dwts. 8 grains. No. 1 winze 860 feet level north sunk 7 feet, total 32 feet. Lode 2 feet wide, value 5 dwts. 10 grains. The 760 feet level south driven 24 feet 6 inches, total 421 feet. Lode 2 feet wide, value 9 dwts. 19 grains. No. 2 winze 760 feet level south sunk 6 feet 9 inches, total 9 feet 9 inches. Lode 1 foot wide, value 1 ounce 6 dwts. 2 grains. The 760 feet level north driven 16 feet 6 inches, total 259 feet 9 inches. Lode small. No sample. No. 4 winze 660 feet level south sunk 3 feet 6 inches, total 61 feet 6 inches. Lode 4 inches wide, value 1 ounce 12 dwts. 16 grains. No. 5 winze 660 feet level south sunk 8 feet 3 inches, total 78 feet 6 inches. Lode 9 inches wide, value 9 dwts. 19 grains. No. 6 winze 660 feet level south sunk 6 feet 9 inches, total 15 feet. Lode 3 feet wide, value 1 ounce 10 dwts. The 280 feet level north from fold driven 16 feet 9 inches, total 145 feet. Lode 1 foot 6 inches wide, value 10 dwts. 21 grains. No. 4 winze 280 feet level north sunk 2 feet, total 32 feet. Lode 1 foot 6 inches wide, value 5 dwts. 10 grains. No. 3a winze, 215 feet level north, commenced, sunk 4 feet 9 inches. Lode 2 feet wide, value 2 ounces 1 dwt. 9 grains. No. 4 winze, 215 feet level north, sunk 3 feet 3 inches, total 88 feet 9 inches. Lode 1 foot 6 inches wide, value 15 dwts. 6 grains; communicated with the 280 feet level. Low's shaft sunk 5 feet, total 683 feet 4 inches. The 610 feet level south driven 11 feet 6 inches, total 178 feet 6 inches. Lode still very small; no sample. The 510 feet level south driven 16 feet 6 inches, total 388 feet 3 inches. Lode 6 inches wide, value 7 dwts. 15 grains. No. 1 winze, 510 feet level south, sunk 5 feet 3 inches, total 80 feet. Lode small; no sample.—Prohyn's shaft. Sinking resumed below the 1050 feet level, sunk 4 feet 6 inches, total depth 1055 feet. The 1050 feet level north driven 10 feet, total 45 feet. The lode is 6 inches wide, value 6 dwts. 12 grains; communicated with the No. 1 winze from the 950 feet level north. No 1 winze, 1050 feet level north, commenced, sunk 6 feet. Lode 6 inches wide. No sample. The 950 feet level south driven 5 feet, total 357 feet. Lode pinched; no sample; suspended. No. 1 winze, 950 feet level south sunk 6 feet, total 60 feet. Lode 9 inches wide, value 11 dwts.—Exploratory work, Wallroth's shaft. The level south from crosscut east from 280 feet level south commenced, driven 8 feet 6 inches. Lode 1 foot wide, value 6 dwts. 21 grains.—Munday's lode explorations. The 280 feet level south driven 18 feet, total 121 feet. Lode 2 feet wide, assay value 8 dwts. 17 grains; suspended. The 280 feet level north commenced, driven 2 feet. Lode 3 feet wide; no sample. Throughout the mine 50 stopes are being worked, which are yielding quarts of the average quality, all of which will be measured at the end of month, and reported on in the usual course.

ZAPOPAN MINES.—The following information has been received from the mines:—Engine shaft on northern lease is down 120 feet; other shafts northern leases down 80 feet and 69 feet respectively. Engine shaft on southern lease is now 115 feet deep; other shafts on southern leases are respectively 60 feet and 30 feet deep. All six shafts are yielding good battery stone. Number of men engaged on the leases is about 200, including tributors on short agreements.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices Liskeard, Cornwall, writes (March 21) as follows:—The advance on the tin standard and further reduction of stocks for the middle of the month has not improved prices. The unsatisfactory result of meetings held this week offers no inducement to buyers, several of the leading mine shares being scarcely saleable. Closing prices:—Blue Hills, 4s. to 5s.; Carn Brea, 1 to 1⅛ c.p.; Cook's Kitchen, ⅝ to ¾; Devon Consols, 1⅝ to 1⅞; Dolcoath, 32½ to 33; Drakewalls, 1s. to 1s. 6d.; East Pool, 4⅛ to 4⅜; Killifreth, 10s. to 11s. 6d.; South Crofty, 4s. to 5s. c.p.; South Frances, 2s. 6d. to 4s.; Tincroft, 4 to 4¼; West Kitty, 4⅜ to 5; West Frances, 2s. 6d. to 4s. c.p.; Wheal Agar, 2s. 6d. to 4s.; Wheal Basset, ½ to ⅝; Wheal Grenville, 9 to 9½.

Messrs. ABBOTT AND WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of Thursday, March 21:—The market has been steady this week, but attention has been mainly directed to Dolcoath. If Mr. Basset will accept a reasonable rate of dues, it is probable that there will be no difficulty in converting the company into a Limited one, but we question if this can be arranged at 1–20th. Quotations herewith:—Blue Hills, ⅛ to ⅜; Carn Brea, ¾ to 1; Cook's Kitchen, ½ to ¾; Dolcoath, 33⅛ to 34½; East Pool, 4⅜ to 4⅝; Killifreth, ⅜ to ½; Polberro, ⅛ to ¼; South Condurrow, ⅛ to ¼; Tincroft, 4 to 4⅛; West Kitty, 4⅜ to 5½; Wheal Agar, ⅛ to ¼; Wheal Basset, ½ to 1; Wheal Grenville, 8½ to 9½; Wheal Kitty, ⅛ to ¼. Tin, 62⅝.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write March 21 (noon):—Other markets having taken the major portion of attention during the past week has caused home rails to be very dull. Changes in prices therein are somewhat irregular, but the balance is on the side unfavourable to holders. Indeed, considering the traffic returns, and the lack of business in this market, prices, as a whole, have held up fairly well. Other sections of the market have been brisk, especially gold mines (of the South African district principally), but Americans also have come into favour, and, in the last-named, many substantially-advanced quotations are established. Trunks, also, have shared with Americans in the better tone, but to a much less extent as regards amount of rise. All the other major markets, too, show better figures, and these as regards Consols, colonials, home corporation stocks, &c., and foreigners are, as regards those quoted here, at any rate, without any declines to set against them. Whilst the above is a general statement on balance for the week, fluctuations have occurred, of which the following is a daily record so far as rails are concerned. Friday last was a dull day for home rails and Americans, the only notable change occurring in Central Pacifics. In Canadians, Pacifics were weak, but Trunk issues maintained previous days' prices with just a slight advance in Ordinary. On Saturday, North-Easterns came in for depreciation of about ½, but otherwise home rails were unaltered. Americans generally began steady, and a few solitary dealings were marked; Central Pacifics, again a feature, going strong, and after some relapses finished with a gain on the day of nearly $1. In Canadians, Trunk issues unaltered, but Pacifics gained a little in price. In Mexicans, nothing doing. Monday found market lower for home rails. North-Easterns in the van of the retreat. Brighton A were an exception, quoting fractionally better. New York prices gave a good tone for Americans from the start, and this tone developed as the day proceeded, the close being healthier than for some time past. Mexicans stiffened up a bit. Tuesday was a brighter day. Home rails, joining in the improved condition, showed advances ranging from small fractions up to 1 per cent. Americans brisk, and, though best points were not in all cases maintained, a general rise on the day was established. Canadians did not share in the general upward move, being kept back by traffic, but, doubtless, these traffics would have had a more damaging effect if surrounding markets had not been somewhat buoyant. To-day, Bolckows and Ebbw Vales, and iron and coal shares generally were enquired for at better prices, especially for the two named. Yesterday's batch of traffic returns were poor, and brought prices back all round, but not to any large extent in any case. Americans went off again upward, though they did not maintain best points up to the finish and Central Pacifics were an exception, falling nearly a dollar. Mexican Rail issues just fractionally higher. Canadians lower, and flat generally, with however, some transactions marked on them. This morning home rails begin without any change from last night's close worth naming. Canadians practically unaltered, the slight changes amounting to an equation. Americans within ⅛ of yesterday's finish, and where altered they are irregular. Consols are ⅛ in advance on the week. Colonial government stocks, &c., show but few changes, viz., Natal Inscribed 1, and Cape of Good Hope Inscribed ⅛, both higher. Corporation stocks, &c., quote only advances in prices, viz., Bradford Four per Cent. 1, Manchester Three per Cent. ⅛, Nottingham Three per Cent. ⅛, and Manchester Four per Cent. ⅛ higher. In foreigners there is a similar record to the former classes. Brazilian Four and a-Half per Cent. are 2⅛, Brazilian Four per Cent. 2⅛, Argentine Six per Cent. 1⅛, Argentine Five per Cent. 1, Italian Rentes ⅜, Spanish Four per Cent. ⅜, Portuguese Three per Cent. ⅛, Mexican Six per Cent. ⅛, Turks D ⅛, and Uruguay Three and a-Half per Cent. ⅛ better. From the miscellaneous markets, apart from mines, the number of transactions has been few, excepting in one or two coal and iron concerns and Ship Canal issues. Quotations show varying movements in the several sections, with, however, a balance slightly on the side of improvement generally.

BANKS have furnished a moderate number of transactions, Salfords and Districts again taking the lead on the dealings, the others being desultory. A few advances of an ⅛ to ¼ are the only recorded changes in prices.

INSURANCE.—Very little doing, and prices contradictory.

COAL, IRON, &c., somewhat in demand, but little done save in Ebbw Vales. These have risen over £1 per share in the last few days, but they are exceptional in their advance, others being very small in comparison, with also little business marked.

MINES have been very brisk, but, with the exception of Charterers and Darien A, mostly in concerns not quoted in list here. All better (of those quoted here) with the exception of De Beers, which mark fall of ⅜. Tintos have been done a few times at about stationary prices, but they quote ¼ up on the week.

COTTON SPINNING, &C.—Whilst market remains dull, the tone is better than a while ago.

TELEGRAPHS.—Anglo-American issues ⅛ to ¼ better, Eastern Preference ⅛ down, these comprising all the changes marked.

BREWERIES. — Allsopp's quieter, and unaltered on balance. Guinness' 3, Tamplin's ⅛, and Hardy's ¼ up, whilst Manchester Ordinary are ⅛ down.

MISCELLANEOUS.—Very little doing outside Ship Canal issues. Suez Canal 1, Imperial Continental Gas 1 to 3, Liverpool United Gas 2, and Bovril ⅛ up. Bell's Asbestos ⅛, and Manchester Carriage B and C issues ⅜ and ⅛, respectively, down. Ship Canals have been fairly active, and have fluctuated within narrow limit, but, up to writing, show no quotable change on the week.

LATER (4 P.M.).—Market lower all round for home rails and Americans, whilst Canadians and Mexicans present no feature of alteration. Ship Canals a trifle better to-day.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (March 21), writes:—During the past week a large amount of business has been done in South African land and gold shares. In other departments business has been a little more active on a more hopeful view of trade prospects, and better prices for metals.

In shares of coal, iron, and steel companies prices are steady. African Coal are at 7s. 3d., Ebbw Vale 7⅛, Marbella 42s., and Steel Company of Scotland 36s.

In shares of copper concerns, prices are generally better. Tharsis improved to 92s. 6d. and Tinto to 13½. Cape are at 27s. 6d. to 30s. Arizona lower at 13s. 6d.; this company's report for last year shows a credit balance of £33,861, but no dividend is declared.

In shares of gold and silver mines, a large business continues to be done. The chief dividend-paying mines, however, have now got up to pretty high prices, which has turned the demand into land and exploration companies' shares, and even the cheapest class of speculative shares. British South Africa Chartered improved to 56s. 3d., and Bechuanaland to 41s. 3d., although both are now easier. It is said these are to be officially quoted at Paris. Oceana Land have also been in favour up to 3⅛; these shares were some years ago over 20. Langlaagte Royal and United have improved on amalgamation rumours. Wemmer are also in favour. This company have paid off their debt to the bank, and if they can keep up profits at last month's rate—£8378—high dividends should soon be paid. Montana advanced from 11s. 1½d. to 12s. 9d. Broken Hill have been largely dealt in from 36s. 9d. up to 41s. 6d. The advance is both due to "bears" closing and to fresh purchases on the rise in silver on expectations of some treatment being found suitable for the sulphides. The returns from the mine are also keeping well up. East Sheba Reef and Zwartland Transvaal wanted. Afrikander, 32s. 6d.; Australian Consols, 2s. 6d.; Balaghat, 3s.; Barley's Reward, 10s.; Block B, 22s. 6d.; Big Golden Quarry, 2s.; Buffelsdoorn, 5½; Coolgardie (Sherlaw's), 13s. 6d.; Craven's Caledonia, 4s.; Crœsus, 63s. 9d.; Caratal, 1s. 3d.; Coetzeestroom, 4s. 6d.; Clewer Estate, 37s. 6d.; Comet, 51s.; Eastleigh, 46s. 3d.; Emma, 1s. 3d.; East Rand, 71s. 3d.; Frank Johnson, 20s.; Gwelo, 12s. 9d.; Golconda, 22s. 6d.; Gold Fields Deep, 4⅜; Gold Coast Development, 6s. 6d.; Graskop, 3s. 6d.; Holcomb, 2s. 9d.; Hauraki, 7s. 6d.; Johannesburg Investment, 67s. 6d.; Johannesburg Gold Fields, Kaboonga, 4s. 3d.; Luipaard's Vlei, 16s. 6d.; Londonderry, 28s.; Lower Roodepoort, 7s. 6d.; Lisbon, 4s. 6d.; Mysore-Wynaad, 14s. 6d.; Mallina, 20s. 6d.; Murchison, 6s.; Mozambique, 27s.; Matabele Reef, 21s. 3d. premium; Nundydroog, 37s.; North Sheba, 14s.; New Charters Towers, 5s. 6d.; Nigel Deep, 51s. 3d.; Orion, 78s. 9d.; Otto's Kopje, 5s. 9d.; Pearl Central, 30s.; Primrose, 6⅜; Pestarena, 5s.; Randfontein, 39s.; Roodepoort Deep, 67s. 6d.; Sutherland Reef, 27s. 6d.; South-West Rand, 38s. 9d.; Southern Geldenhuis, 8s.; Spes Bona, 42s. 6d.; Sheba Queen, 8s. 6d.; St. Augustine, 8s. 6d.; Virginia, 3s. 9d.; Victoria and Altamira 2s. 9d.; Willoughby Consolidated, 32s. 6d.; and Zapopan, 8s.

In shares of miscellaneous companies there has not been much business doing. Oil companies shares are all lower, as it is thought the Scotch companies will lose more by the fall in ammonia than they will make by the rise in burning oil, provided the latter is agreed to. Broxburn's declined to 9⅜, and Young's 34s. 3d.; Lawes Chemical, 7⅛; Nobel's Explosives, 15⅛; and Spiels's Petroleum, 10s.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of March 21:—Since last weekly report there has been an advance in Scottish railway ordinary stocks. Caledonian Deferred has risen from 41 9-16 to 41⅞; Glasgow and South Western from 106⅞ to 108; Highland from 119½ to 120. North British has fallen from 37 to 36⅞. With the exception of the Highland, whose financial half-year ends a month later than the others, all the Scottish railway companies have now issued their reports. Although the strike in the coal trade has diminished the mineral traffic and the dividends on the three leading lines very seriously, their passenger and merchandise traffics show an improvement. The North British has over £21,000 more from the passenger traffic, and £22,000 more from merchandise; the Glasgow and South Western £13,600 more from the passenger department, and nearly £9000 more from merchandise. The Great North of Scotland, which was not directly affected by the strike, and which has maintained its rate of dividend, shows an increase of £2800 in the passenger department an amount which would be insignificant in the accounts of any of the great companies, but which shows no despicable progress in this comparatively small company. The changes in Bank shares are few. Clydesdale have risen from 19 1-16 to 19¼; Commercial from 66¾ to 66¼; Union from 21 13-16 to 22; Commercial Bank of Australia Preference have advanced from 45s. to 52s. In insurance shares, Caledonian have declined from 29¾ to 29¼; Royal from 51 to 51½; North British and Mercantile have risen from 38 to 38⅝; Liverpool and London and Globe from 48⅜ to 48⅝; Scottish Union A from 87s. 3d. to 88s. 6d.; Standard Life from 65⅛ to 65¾; National Guarantee from 82s. 6d. to 83s. 6d. There have been numerous transactions in British South Africa (Chartered) shares, which have gone up from 44s. 6d. to 53s. In mining shares, Lothian Coal Preference have receded from 9¾ to 9½; Arizona Copper from 14s. 6d. to 13s.; Niddrie and Benhar Coal have risen from 43s. to 44s. 3d.; Rio Tinto from 13 to 13⅜; Tharsis from 90s. 6d. to 91s. 6d.; Broken Hill Proprietary from 37s. to 40s. A considerable business has been done in the shares of unquoted South African and Australian miners. In oil shares, Broxburn, Linlithgow, and Young's are lower.

MINERS' EIGHT HOURS BILL.—This Bill provides that a person shall not in any one day of 24 hours be employed underground in any mine for a period exceeding eight hours from the time of his leaving the surface of the ground to the time of his ascent thereto, except in case of breakage of machinery, explosions of fire-damp, or any accident causing the entire stoppage of the working of the mine. Any employer, or the agent of any employer, employing or permitting to be employed any person other than the officials of the mine as defined in the Coal Mines Regulation Act, 1887, in contravention of this enactment, shall be liable to a penalty not exceeding 40s. for each offence, to be recovered in the same manner in which any penalty under the Acts relating to factories and workshops is recovered. The Act shall come into operation on the 1st day of January, 1896.

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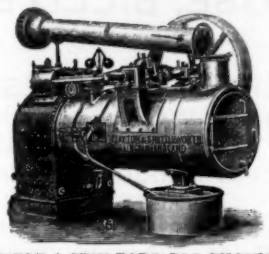

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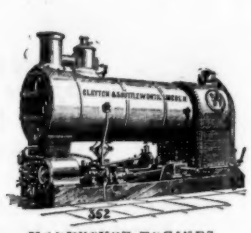

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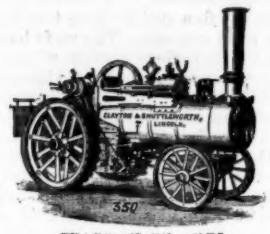

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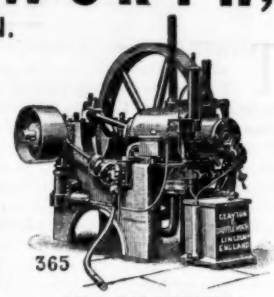

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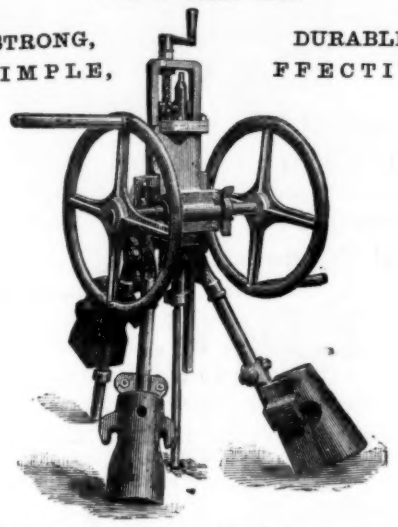

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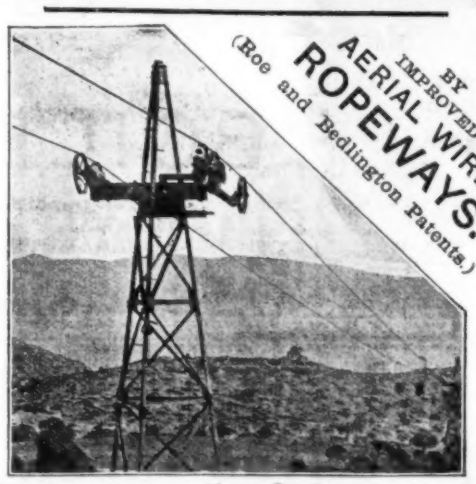

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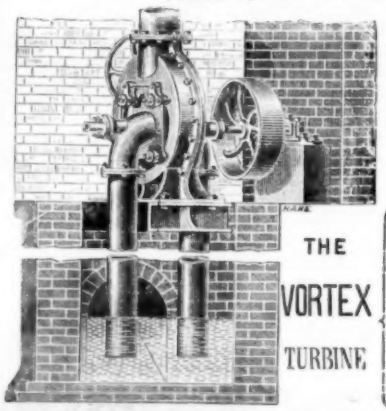

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VENTERSKROON GOLD FIELDS.

Report by Mr. H. BUSH

THESE fields, which have for such a long time laid dormant, are at last getting the proper amount of attention paid to their reefs, together with the financial backing that the various assays of their numerous reefs warrant. The reefs have from time to time been cried down by various parties, who, all along, have tried the squeezing-out process, but in this case without effect. The formation of the district is principally composed of highly-tilted beds of sandstone and quartzite, interstratified with auriferous conglomerate reefs. These conglomerate reefs (locally known as bankets) are composed of waterworn quartz pebbles cemented together by a ferruginous cement into a hard mass. At lower depths the reefs become more refractory, and show considerable quantities of sulphides carrying gold in payable quantities.

The reefs along the principal range of hills are numerous, and range from 2 feet to 20 feet in width. They are exceedingly well defined, with splendid hanging and foot walls, dipping about 60°, requiring little timber. The outcrops of the reefs occur along the crown of the range, and vary from 4 feet to 800 feet above the level of the valleys. Adits can be driven at the low levels, striking the various reefs at (say) 500 feet, draining the mines, and not requiring expensive hauling engines for bringing the ore to the mill. It may be safely stated that these reefs will pay handsomely with mill and cyanide, as the main average of two or three of the medium-sized reefs gives 15 dwts. to the ton, with a cost of winning of not more than 10s. per ton. Timber is abundant. Coal is not far distant, and can be landed on the fields for 20s. per ton. The railway is being constructed, and will be within 15 miles of the fields. The water supply for milling purposes is second to none on the Rand.

Owing to Mr. Bush's visit to this property, and reporting on it, he was unable to send any other reports on the other properties.

— In accordance with the recommendation of their manager, the directors of the CALIFORNIA MILLING AND MINING COMPANY have agreed, in conjunction with the New Colorado Silver Mining Company, to the formation of a new company, to be called the Gregory Milling Company (Limited), for the purpose of erecting a custom concentrating mill at Blackhawk, on a site belonging to the California Milling and Mining Company. The capital of the new company will be £10,000 in £5 shares, and the shareholders of the two companies are to have the opportunity of applying for the shares before any allotment is made.

— The London office of BAYLEY'S REWARD CLAIM GOLD MINING COMPANY (LIMITED) is informed by cable from the head office at Melbourne, that the information asked for by them is being sent by first post, and that the recent yields are considered to about represent the average of dumps and stopes.

NEW CRŒSUS GOLD MINING COMPANY (LIMITED).—The offices have been removed to 120, Bishopsgate-street Within, E.C.

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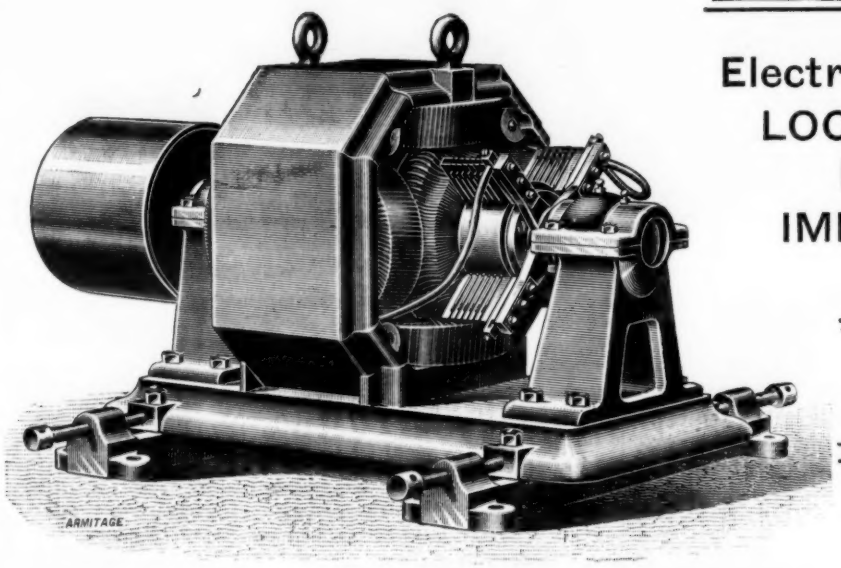

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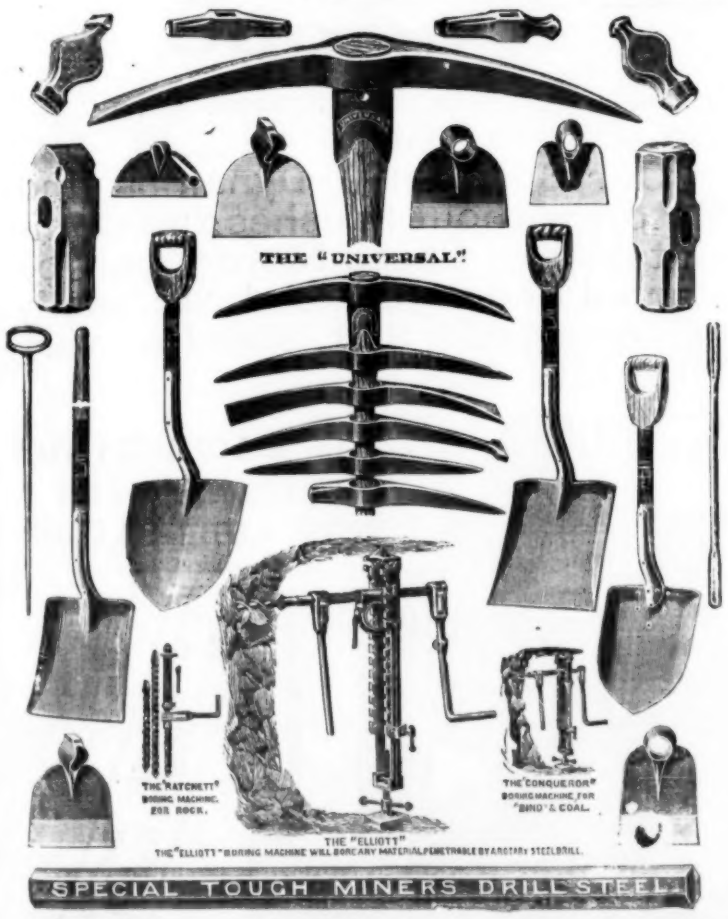
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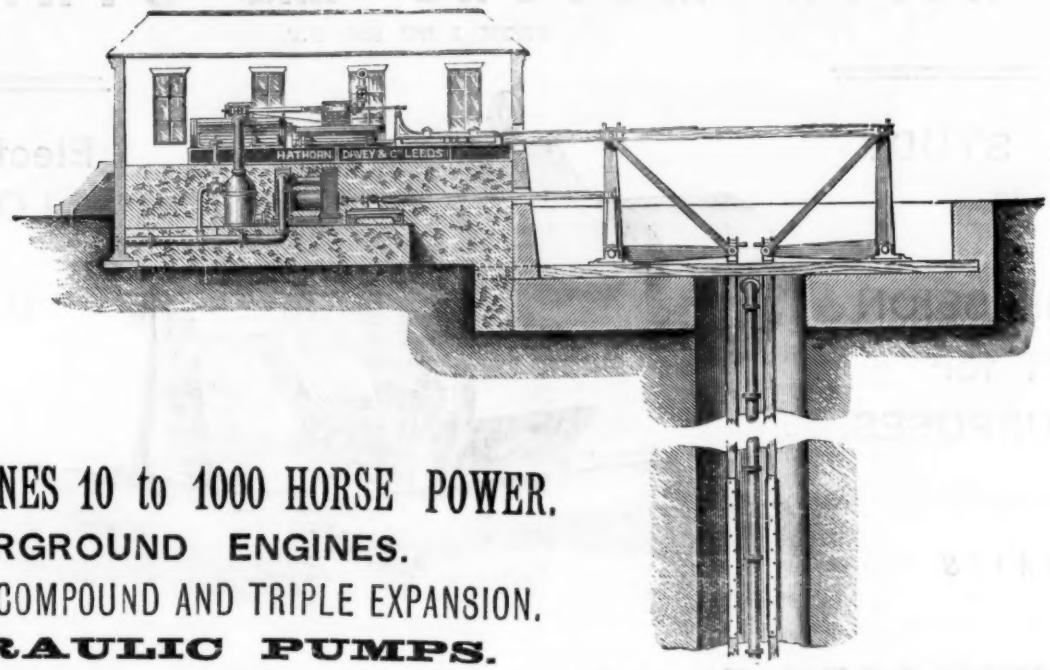

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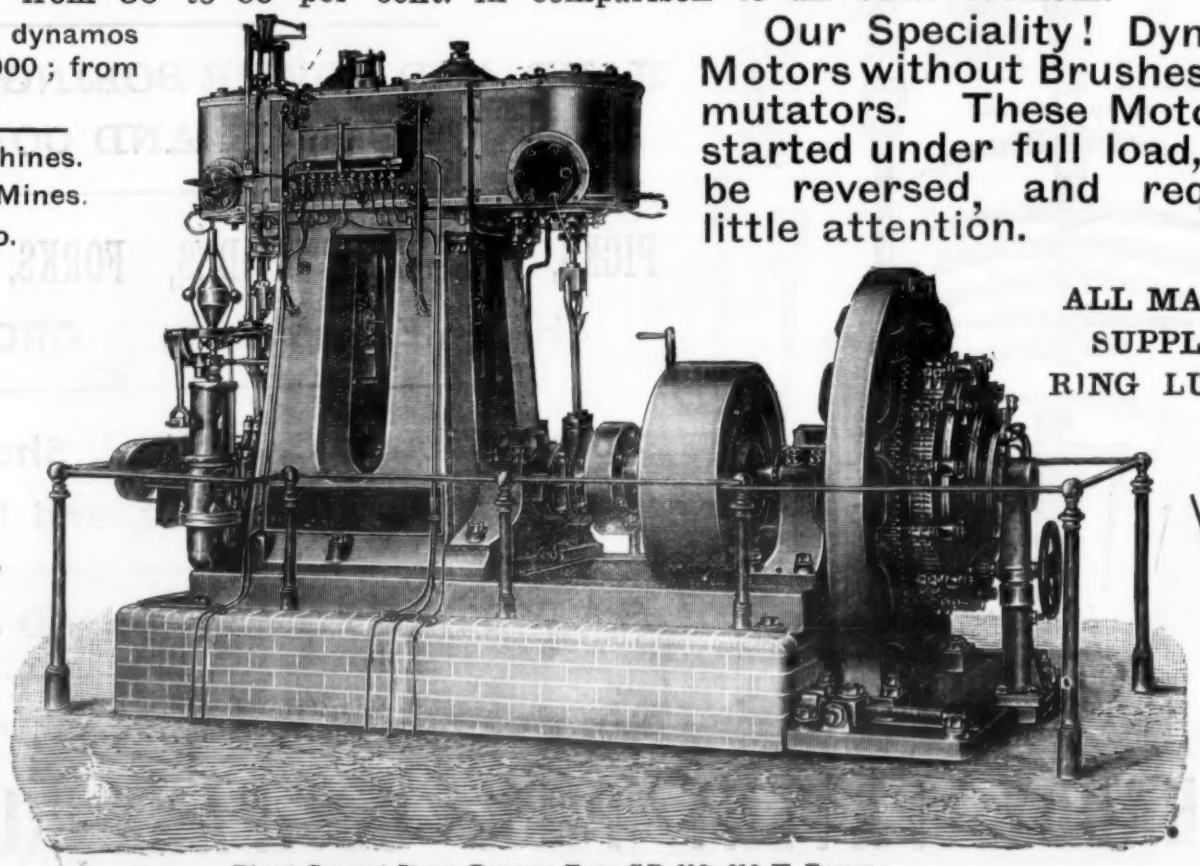

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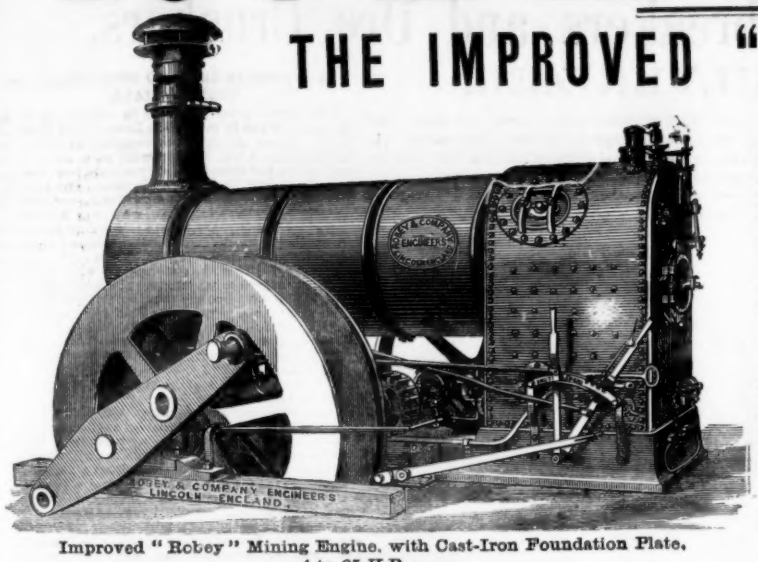

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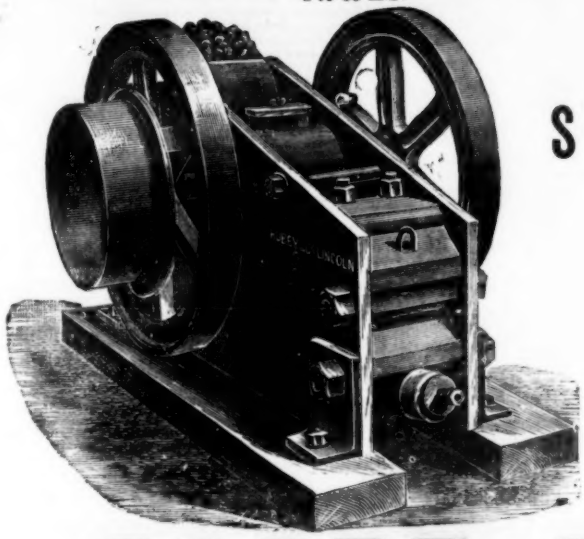

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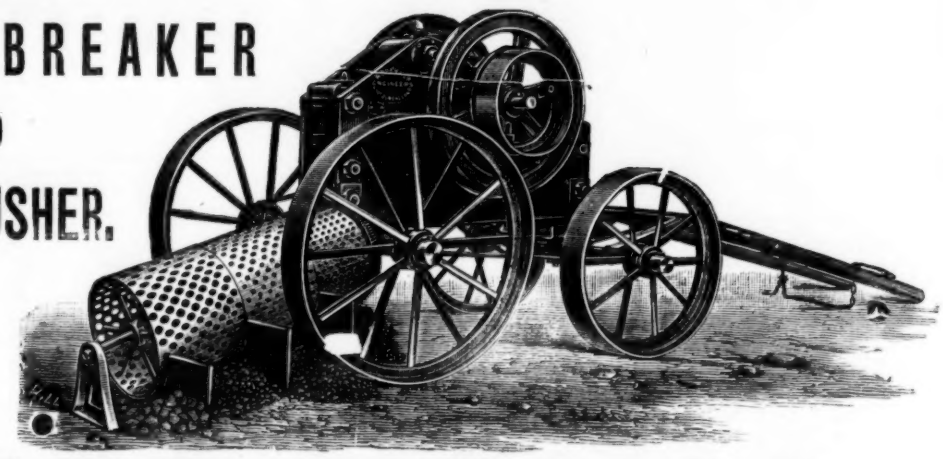

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Master of the South Wilts Hounds.

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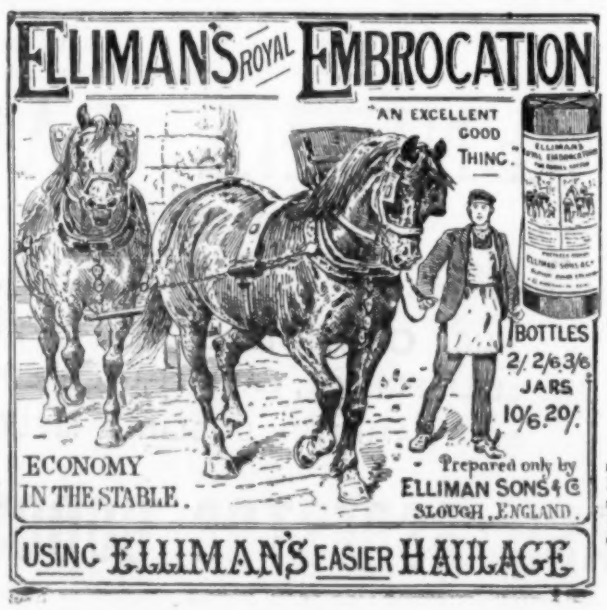
M. J. BALFE.
Master of the Roscommon County Staghounds.



From Lord Haddington, Tyningham, Prestonkirk, N.B.
December 27th, 1885

SIRS,—Elliman's Royal Embrocation is used in my stables, and I consider it indispensable in any stable, but especially in the stable of a Master of Hounds.
HADDINGTON.
Master of the Berwickshire Hounds

—o—

From R. Burdon Sanderson, Esq., Warren House, Belford
July 10th, 1892.

SIRS,—Elliman's Royal Embrocation is used in my stables, and I consider it very useful.
R. BURDON SANDERSON.
Master of Percy Foxhounds.

—o—

From Wm. J. Buckley, Esq., Penyfai, Llanelly.
July 16th, 1892.

DEAR SIRS,—I have much pleasure in recommending your Royal Embrocation. I always keep a stock in my stables and kennels. My farm bailiff has also found it of much value among my herd.
WM. J. BUCKLEY.
Master of Carmarthenshire Foxhounds.

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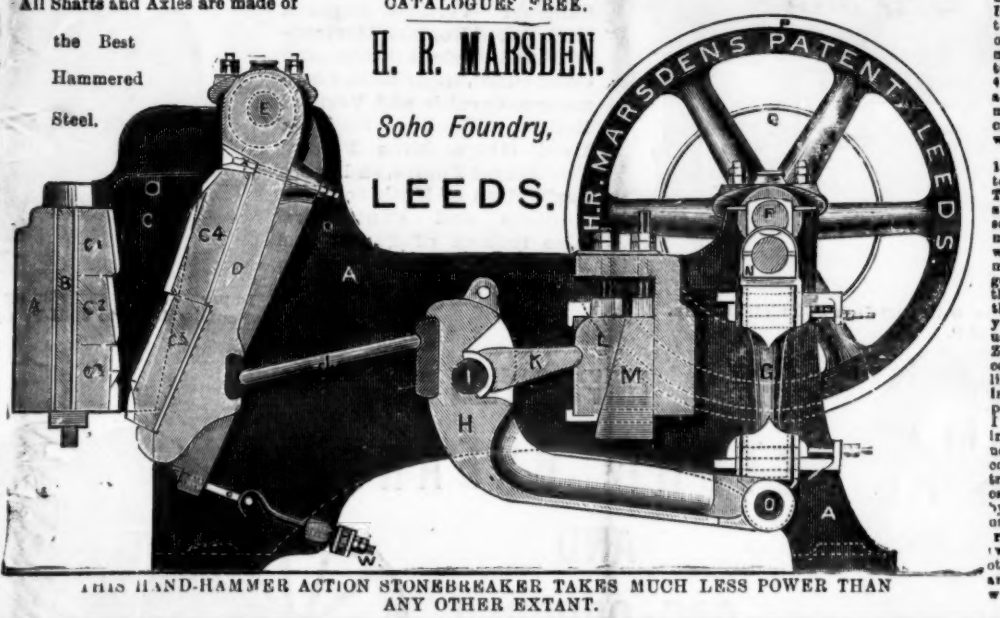

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"It is with the greatest satisfaction that we write these few lines in order to acquaint you that the 12×3 Pulveriser you provided us with, has quite fully given the results you represented to us, completely reducing our material to an impalpable powder at one operation. Should you refer any one to us we should have much pleasure in recommending the machine."

"I have great pleasure in bearing testimony to the merits and capabilities of your patent combined fine crusher and sieving apparatus. I have tried it on a variety of ores and minerals, and it pulverizes them with equal success. You can put in a small paving stone and bring it out like flour."

"In reply to your favour, I have much pleasure in informing you that the 12×3 Pulverizer we had from you is giving us every satisfaction. The material we are operating on is an exceptionally hard one. I am well satisfied with its working."

"Our experience is that the motion and mechanical arrangements of your machine are the best for pulverizing that we have ever met with"

"The reports from our mines as regards the working of your Fine Crusher (20×5) recently supplied are very favourable, although we cannot quote you exact figures. On being got into position it was tried by hand, with the result that it made short work of the biggest pieces of ore we put into the hopper. You might say how long you would take to deliver another of the same size."

"As I once before stated, your machine is a perfect pulverizer."

"I am sure the machine will be a success, and a great one, and there is any amount of demand for such a machine. We can work it with 20 lbs. of steam and our engine, which is a 12 h.p., plays with the work, in fact we run the Stonebreaker and the Pulverizer both together with 35 lbs."

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